R-850152

PENNSYLVANIA
PUBLIC UTILITY COMMISSION
Harrisburg, PA 17120

Public Meeting held March 23, 1988

Commissioners Present:

Bill Shane, Chairman
William H. Smith, Vice Chairman
Linda C. Taliaferro
Frank Fischl

Pennsylvania Public Utility Commission . Docket No. M-880183

v.

Philadelphia Electric Company

OPINION AND ORDER

BY THE COMMISSION:

On February 24, 1988, Philadelphia Electric Company (PECO) filed with the Commission a Petition for Stay of our Order entered February 23, 1988 directing PECO to file temporary rate tariffs reducing its rates by $30,393,000 on an annual basis for service rendered on and after March 1, 1988. Alternatively, the Petition requested the Commission to certify the order for interlocutory review pursuant to Section 702(b) of the Judicial Code, 42 Pa. C.S. §702(b). An Answer has been filed by the Consumer Advocate of Pennsylvania (OCA).

Our temporary rate order was issued in response to the lengthy shut down of the Company's Peach Bottom Atomic Power Station which commenced on March 31, 1987. On that date, the Nuclear Regulatory Commission (NRC) found that the plant could not be operated safely because its inspectors had observed breakdowns of discipline and management at the facility which included instances of operators leaving the control room unattended and of control room operators sleeping while on duty and while responsible for the control of an operating nuclear power reactor. Later investigations disclosed allegations of harassment of safety personnel by plant employees and managers, use of plant computers for video games by on duty personnel, illicit drug use and sales within the plant, rubber band and paper airplane fights by control room operators and a near total breakdown of management discipline and control of safety related

operations. A PECO plan for restart submitted to the NRC on August 7, 1987 was rejected by the NRC, and a second plan (which was only recently submitted in its entirety and which appears to be currently lacking the schedule of implementation which will be required prior to restart) is still under review by the Nuclear Regulatory Commission.

We take administrative notice of several recent events reported in the financial press or by PECO itself:

1. Following our temporary rate order, both of the major bond rating agencies, Moody's Investor Services and Standard and Poor's, publicly announced that they were reexamining the creditworthiness of PECO as a result of the temporary rate decrease. Both rating agencies recently announced that they reaffirm PECO's existing rating and consider that no downgrade is required.

2. The market price of PECO's common equity, as reported on the New York Stock Exchange, has shown little movement in recent weeks either following the issuance of the Commission's temporary rate order on February 24, 1988 or after the announcements of bond rating agencies or following the management changes announced March 7, 1987 (recited below). As of Wednesday, March 16, 1988, PECO common equity was trading at $19.375 per share, approximately the middle of its 52 week range.

3. As of the date of this order, Peach Bottom Atomic Power Station remains in cold shut down in compliance with the March 31, 1987 order of the NRC, and no schedule for restart has been either submitted by PECO, or approved by the Nuclear Regulatory Commission.

The Petition for Stay

With regard to PECO's petition for stay, PECO must demonstrate four things in order to be successful.

1. PECO must demonstrate that it is likely to prevail upon the merits of the question presented.

2. PECO must demonstrate that absent a stay, it will suffer "irreparable harm." Mere pecuniary loss is not irreparable harm.

3. PECO must demonstrate that the stay will not hurt the interests of ratepayers.

4. PECO must demonstrate that the stay will not be contrary to the public interest.[1]

With regard to the first standard, this Commission will not presume that it has issued an order which is contrary to law, and if this standard were applied to every stay petition made to the Commission, no stay could be granted. We will not require, for the purposes of ruling on this petition, that PECO demonstrate that it is likely prevail upon the merits, since PECO has failed to carry its burden of proving its entitlement to a stay for other reasons. We will simply note that while PECO contends that there are "serious legal issues aris[ing] from the unprecedented action of the Commission in disallowing all of the equity return associated with Peach Bottom under §1310(d) while at the same time enforcing the provisions of §1322 of the Public Utility Code denying a recovery to PECO of the additional energy costs incurred as the result of the shutdown of Peach Bottom," the Peach Bottom plant is still out of service, not providing any benefit to ratepayers, and is at least arguably no longer used and useful in the public service. It is elementary ratemaking law that a utility may not demand a return upon plant not used and useful.

Hence, PECO's assertion that the Commission's temporary rate order, which reduces PECO's rates on an interlocutory basis for only part of that return, is somehow novel or without precedent appears clearly wrong. The Legislature's enactment of 66 Pa. C. S. §1310 permitting the Commission to direct a temporary rate change prior to hearing is not of recent vintage, and the recent enactment of 66 Pa. C. S. §1322 specifically reserves to the Commission its existing powers with regard to rates. While PECO contends that there are "serious legal issues" arising from this temporary rate order, every litigant views its case as raising serious legal issues. Several of the issues which PECO cites as support for its assertion that it is likely to prevail are primarily factual issues[2]. As factual issues are better explored and resolved in a trial-type contested hearing, PECO's assertion that the matter should be stayed because there

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1/ These standards have been adopted by our Supreme Court in Pennsylvania Public Utility Commission v. Process Gas Consumers Group, 502 Pa. 545, 467 A.2d 805 (1983) and were derived from Virginia Petroleum Jobbers Association v. Federal Power Commission, 259 F.2d 921 (D. C. Cir. 1958).

2/ In part II of this order, we conclude that PECO has not successfully demonstrated that this matter should be certified as an interlocutory matter requiring appellate review. Our comments in this section about the need to have factual issues resolved before appellate review are also pertinent in considering PECO's request for such certification.

are "serious legal issues" is not a reason, but a rationalization.

With regard to PECO's assertion that, absent a stay, it will suffer irreparable injury, we find that claim to be without merit. The actual reduction in rates occasioned by the temporary rate order is about 1% of PECO's gross intrastate revenues. Two major bond rating agencies have reviewed the effect of the temporary rate order upon PECO's financial standing and have found that it has had no significant effect. At least in the aggregate, the company's common equity is being traded at about the same price range as it was traded before the order, with little volatility on a day to day basis. PECO neither alleges nor proves that its ability to maintain its current operations, meet its payroll, meet its debt payments, or provide service to the public is in any way significantly impaired by the temporary rate order. PECO's major argument on this issue is that the Commission's order will "taint" PECO's reputation in the financial community. PECO's theory is mysterious, since it does not attempt to describe the nature or exact consequences of the purported "taint," and the argument appears wholly unsupported by anything but PECO's subjective interpretation of the financial world. We find PECO's "taint" theory to be puffery and without factual support. Even were the financial community to respond in the way PECO describes, it has already responded, and the response has been nearly imperceptible.

With regard to the harm which may be done to others by the imposition of a stay, we believe that such harm is of greater significance than the speculative harm done to PECO by this modest temporary rate reduction. PECO has ample opportunity to muster the evidence it claims will support its position that the temporary rate increase is not supported, and has a clear path to follow in pressing that view.[3] PECO's ratepayers are not as well protected.

We additionally believe that there is a compelling public interest in assuring both utilities and ratepayers that this Commission will employ the statutory tools at its disposal to enforce the Public Utility Code's prohibitions against unjust and unlawful rates. We have acted with considerable forbearance in this matter to date, having allowed nearly a year to elapse after the NRC-ordered shutdown of Peach Bottom. PECO has successively offered a number of projected restart dates for the plant, each of which evaporated as it approached. It is now

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[3]/ PECO has the right, clearly delineated at 66 Pa. C. S. §1310(d), to file a complaint against temporary rates. After filing of such complaint, PECO would be entitled to hearings to present its case. This PECO has declined to do as of this date.

apparent that Peach Bottom will not be in service within a short period of time.

This Commission may take actions from time to time which are viewed with disfavor by the financial community. The views of investors are necessarily governed by a rational self interest which does not always consider the rights of the public. It would not be prudent to equate the goals of investors with the public interest, although to the extent that utilities under our jurisdiction rely upon such markets for operating capital, a judicious concern for the role of the capital markets is part of the regulatory process. In this instance, where the facility is clearly no longer used and useful, a stay of the Commission's rate recognition of that status would be contrary to the public interest, notwithstanding the resulting reduction in Company revenue. The Company has no entitlement to a return on its idle facilities and thus the continued collection of revenue for that purpose would ignore consumer interests.

Since PECO has failed to satisfy the standards for grant of a stay, its request will be denied.

Certification of Interlocutory Order

The general rule concerning the appealability of interlocutory orders is that such orders are not appealable absent special circumstances. 42 Pa. C. S. §702(b). Ordinarily, in the case of a temporary rate order issued under 66 Pa. C. S. §1310(d), an appeal can only be taken after the affected utility has filed a complaint against the temporary rates, and after hearing, the utility has obtained a final Commission order ruling upon the complaint and the evidence and testimony provided by the utility. PECO desires to short-circuit this process and appeal the Commission's temporary rate order directly to the Commonwealth Court. In order to do so, it must obtain a certification in the text of the Commission's temporary rate order that the order "involves a controlling question of law as to which there is substantial ground for difference of opinion and the immediate appeal will materially advance the ultimate termination of the matter."

PECO has failed to state the question which it believes should be certified to the Court as a controlling question of law, and additionally has failed to state how such an immediate appeal would materially advance the ultimate termination of the matter.

Despite that failure, we believe that this is not a matter which should be certified to the Commonwealth Court pursuant to 42 Pa. C. S. §702 (b).

Generally, interlocutory appeals of ongoing proceedings are disfavored in Pennsylvania. The principal reason is the strong policy against presenting a matter piecemeal to a reviewing decisionmaker. Such piecemeal review is not only an invitation to obstruction and delay, but presents the real risk that a case presented before it is ripe for review will frustrate and impair the appellate process by the presentation of cases upon skewed, inadequate or undeveloped records. Additionally, there is a strong policy of administrative exhaustion of remedies, which requires a party to exhaust all available avenues of administrative review and redress before invoking the appellate process.

PECO has failed to state the controlling question of law it wishes certified. Nevertheless, favoring PECO with the benefit of the doubt, we will assume for the purposes of ruling upon this motion that PECO intended to appeal the question of the use of 66 Pa. C. S. §1310 (d) by the Commission for the purpose of setting temporary rates which exclude a portion of the return on a nuclear generating station which is not presently providing service to the public. In spite of PECO's characterization of our temporary rate order, we find that it involves neither a novel or controlling question, nor is certification of such question likely to materially advance the ultimate termination of this matter.

This general subject was last an issue during the extended outage of Metropolitan Edison's Three Mile Island Nuclear Generating Station Units I and II, after the serious accident of March 28, 1979 at that facility. Although fortunately, no lives were lost at the time of that accident, the Commission concluded on April 19, 1979 that neither unit was likely to be operating in the near future. Accordingly, we issued a rate order on that date at R-78060626 ordering a temporary rate reduction pursuant to 66 Pa. C. S. §1310(d) to eliminate any return or costs associated with the plant. While Met-Ed did not seek immediate review of that order, it did appeal the matter at the conclusion of the proceeding to address Met-Ed's subsequent complaint against temporary rates. The Commonwealth Court held that the Commission's temporary rate order was well within its statutory powers in Pennsylvania Electric Co. v. Pa. P. U. C., 78 Pa. Commonwealth Ct. 402, 409, 467 A. 2d 1367, 1371 (1983).

PECO claims in the instant petition that "serious legal issues arise from the unprecedented action of the Commission in disallowing all of the equity return associated with Peach Bottom. . .while at the same time enforcing the provisions of §1322 of the Public Utility Code denying a recovery to PECO of the additional energy costs incurred as the result of the shutdown of Peach Bottom."

As we note above, our action is not "unprecedented," and indeed our Peach Bottom equity return disallowance appears in absolute terms to be less onerous than our disallowance of all operating expenses and return on investment in the case of TMI. Nevertheless, PECO claims that the prior disallowance of excess purchased power costs associated with the Peach Bottom outage is what distinguishes this case. The validity of that proposition can only be determined after a factual inquiry. That factual inquiry would focus on the issue of whether, for ratemaking purposes, the purchased power expenses incurred due to an outage constitute the equivalent of cost of service elements other than the operating expenses of the idle generating facility. If PECO believes that our temporary rate order results in an excessive disallowance, it must establish that by competent evidence, not legal argument. Similarly, if it believes that the effect of our temporary rate order results in an inability to earn a fair return, it must file a complaint against the temporary rate order, as provided at 66 Pa. C. S. §1310 (d) and prove that contention by competent evidence. We find that certification of this interlocutory matter to the Commonwealth Court would not materially advance the resolution of this matter, and that PECO should avail itself of its existing right to be heard in a complaint proceeding pursuant to §1310 (d) should it so elect; THEREFORE,

IT IS ORDERED:

1. That the Petition for Stay of the Commission's February 23, 1988 order be and is hereby denied.

2. That the request of PECO to amend the February 23, 1988 order by including a certification that the order "involves a controlling question of law as to which there is substantial ground for difference of opinion and an immediate appeal from the order may materially advance the ultimate termination of the matter" be and is hereby denied.

3. That this order be served upon the petitioner, the Office of Trial Staff, and the Office of Consumer Advocate, and the parties of record in the Company's last rate case at R-850152.

BY THE COMMISSION,

Jerry Rich
Secretary

(SEAL)

ORDER ADOPTED: March 23, 1988

ORDER ENTERED: March 24, 1988

File in (R-850152)

B-863096
B-863098
B-863099 BP/OD

DAVID M. BARASCH, CONSUMER ADVOCATE, Petitioner	:	IN THE COMMONWEALTH COURT OF PENNSYLVANIA
v.	:	
PENNSYLVANIA PUBLIC UTILITY COMMISSION, Respondent	:	NO. 2248 C.D. 1986
UNIVERSITY OF PENNSYLVANIA/ UTILITY USERS COMMITTEE, INC., Petitioner	:	IN THE COMMONWEALTH COURT OF PENNSYLVANIA
v.	:	
PENNSYLVANIA PUBLIC UTILITY COMMISSION, Respondent	:	NO. 2269 C.D. 1986
PHILADELPHIA ELECTRIC COMPANY, Petitioner	:	IN THE COMMONWEALTH COURT OF PENNSYLVANIA
v.	:	
PENNSYLVANIA PUBLIC UTILITY COMMISSION, Respondent	:	NO. 2279 C.D. 1986

BEFORE: HONORABLE JAMES CRUMLISH, JR., President Judge
HONORABLE DAVID W. CRAIG, Judge
HONORABLE JOHN A. MacPHAIL, Judge
HONORABLE JOSEPH T. DOYLE, Judge
HONORABLE FRANCIS A. BARRY, Judge
HONORABLE JAMES GARDNER COLINS, Judge
HONORABLE MADALINE PALLADINO, Judge

ARGUED: December 16, 1987

OPINION BY JUDGE PALLADINO FILED: March 31, 1988

Appeals from an order of the Pennsylvania Public Utility Commission (PUC) entered on June 27, 1986 have been consolidated and are presently before us for disposition. In 2248 C.D. 1986 and 2269 C.D. 1986, David M. Barasch, Consumer Advocate, hereinafter the Office of Consumer Advocate (OCA), and University of Pennsylvania, Utility Users Committee (UUC/UP) have petitioned for review of the PUC's June 27, 1986 order. Also, Philadelphia Area Industrial Energy Users Group (PAIEUG) and Philadelphia Electric Company (PECO) have filed briefs as intervenors. In 2279 C.D. 1986, PECO has petitioned for review of the PUC's June 27 order, and OCA has filed a brief as an intervenor.

All of the present appeals stem from the PUC's resolution of PECO's request for a rate increase. On September 15, 1985, PECO filed supplement No. 15, which was designed to produce an annual base rate increase of $681.8 million.[1] The PUC, by order entered November 1, 1985, allowed the supplement to be suspended by operation of law until June 27, 1986. The PUC then initiated an investigation into the lawfulness, justness and reasonableness of the proposed rates. The case was assigned to an administrative law judge (ALJ).

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[1]This figure is rounded up. The exact proposed increase was $681,760,000. PECO arrived at this figure by calculating an "$893 million increase in rates to reflect operating expenses, and a $207.5 million rate decrease to reflect the reduction in energy costs occasioned by the operations of Limerick Unit No. 1. . . , if operated at a certain capacity level." Pennsylvania Public Utility Commission v. Philadelphia Electric Company, 61 Pa. PUC 589, 594 (1986).

The ALJ held over thirty hearings, during which the parties presented voluminous testimony and evidence. On May 13, 1986, the ALJ issued his recommended decision. Exceptions were filed to the ALJ's opinion, and on June 27, 1986, the PUC entered its order, supplemented with a lengthy opinion,[2] disposing of the exceptions. The June 27, 1986 order is as follows:

> IT IS ORDERED:
>
> 1. That Philadelphia Electric Company not place into effect the rates contained in Supplement No. 15 to its Tariff Electric-Pa. P.U.C. No. 26, the same having been found to be unjust, unreasonable and, therefore, unlawful.
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> 2. That Philadelphia Electric Company is hereby authorized to file tariffs or tariff supplements containing rates, provisions, rules and regulations, consistent with our findings herein, designed to produce annual operating electric revenues of not in excess of $2,852,071,000, exclusive of revenues to be derived from the State Tax Adjustment Surcharge revenues; provided however, that the $350,797,000 annual revenue increase herein authorized must be phased-in over a three year period, with deferred revenues being recovered in the fourth, fifth and sixth year.
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> 3. That said tariffs or tariff supplements may be filed upon less than statutory notice, and, pursuant to the provisions of 52 Pa. Code §3.32(b), the tariffs or tariff supplements may be filed to be effective for service rendered on and after the date of entry of this Opinion and Order.
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> 4. That the tax surcharge shall be computed in accordance with the State Tax Adjustment Surcharge Order of March 10, 1970, as revised.
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> 5. That Philadelphia Electric Company shall file detailed calculations with the

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[2]Commissioner Bill Shane dissented. See 61 Pa. PUC at 694.

tariff filing which shall demonstrate to the Commission's satisfaction that the filed rates comply with this Opinion and Order.

6. That Philadelphia Electric Company shall comply with all other directives contained in this Opinion and Order which are not the subject of an individual directive in the proceeding Ordering Paragraphs, as fully as if they were the subject of a specific Ordering Paragraph.

7. That except as herein granted, the exceptions of all parties to the Recommended Decision are denied.

8. That the several complaints filed by various parties to this proceeding, including those which were consolidated with Docket No. R-850152, are granted or denied consistent with this Opinion and Order.

9. That except as herein modified, the Recommended Decision of Administrative Law Judge Matuschak is adopted as the decision of this Commission.

10. That upon the filing of tariff revisions acceptable to the Commission as being in compliance with this Opinion and Order and upon Commission approval of the tariff revisions, the inquiry and investigation at Docket No. R-850152, et al., shall be terminated and the record marked closed.

Pennsylvania Public Utility Commission v. Philadelphia Electric Company, 61 Pa. PUC 589, 685-86 (1986).

Following issuance of the decision, numerous petitions for reconsideration were filed. OCA filed such a petition on June 27, 1986, asserting that the decision was erroneous because it did not find that PECO created excess generating capacity by placing into service the Limerick I nuclear generating station. On July 10, 1986, OCA filed a supplemental petition for reconsideration,

asserting that §1323 of the Public Utility Code[3] (Code), enacted to become effective on July 10, 1986, was now applicable to the proceedings, and required the PUC to review, in light of the new section[4], the lack of a finding that PECO had excess generating capacity as a result of Limerick I. On July 15, 1986, the

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[3]66 Pa. C.S. §1323.

[4]Section 1323 provides, in part:

> §1323. **Procedures for new electric generating capacity.**
>
> (a) **Excess capacity costs.**--Whenever a public utility claims the costs of an electric generating unit in its rates for the first time and the commission finds that the unit results in the utility having excess capacity, the commission shall disallow from the utility's rates, in the same proportion as found to be excess capacity:
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> > (1) the return on specific unit or units of any excess generating reserve;
> > (2) the return on the average net original cost per megawatt of the utility's generating capacity; or
> > (3) the equity investment in the new unit.
>
> In addition to the disallowances set forth in this subsection, the commission may disallow any other costs of the unit or units which the commission deems appropriate. For the purposes of this section, a rebuttable presumption is created that a unit or units or portion thereof shall be determined to be excess unless found to be needed to meet the utility's customer demand plus a reasonable reserve margin in the test year or the year following the test year, or, if it is a base load unit, it is also found to produce annual economic benefits which will exceed the total annual cost of the plant during the test year or within a reasonable period following the test year.

Governor's Energy Council (GEC)[5] filed a petition for reconsideration and on July 16, 1986, UUC/UP filed a supplemental petition for reconsideration, with both the GEC and UUC/UP asserting §1323 should be applied to the proceedings.

By order entered July 25, 1986, the PUC denied all petitions for reconsideration of its June 27, 1986 order. Appeal to this court followed. We shall address the issues raised in 2248 C.D. 1986 and 2269 C.D. 1986 together, as they are sufficiently similar to warrant such treatment. Resolution of the issues raised by PECO in 2279 C.D. 1986 requires separate treatment, and shall follow our disposition of the appeals at 2248 and 2269.

NO. 2248 C.D. 1986 AND NO. 2269 C.D. 1986

The first issue to be addressed is whether the PUC erred in refusing to apply §1323 to the proceedings. The sequence of PUC orders is fundamental to the discussion of the applicability of §1323. The PUC's order was entered on June 27, 1986. Petitions for reconsideration were filed prior to July 10, 1986, and supplemental petitions were filed after July 10, 1986. All petitions for reconsideration were denied on July 25, 1986. Section 1323 was expressly made "applicable to all cases pending before the commission."[6] Section 1323 became effective on July

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[5]GEC is not involved in the present appeals.

[6]Act of July 10, 1986, P.L. 1238, §19.

10, 1986. Thus, all cases pending before the PUC on July 10, 1986 were subject to the new section. The question before us, then, is whether the present case was pending before the PUC on July 10, 1986.

OCA, UUC/UP and PAIEUG (hereinafter Petitioners for purposes of this discussion) argue that the case was pending before the PUC on July 10, 1986. The PUC and PECO argue that it was not. For the reasons set forth below, we hold that the case was not pending before the PUC on July 10, 1986.

Petitioners advance numerous arguments in support of their position. Their arguments can be summarized as follows: 1) a case is pending until its final disposition on appeal or, if no appeal is taken, at the end of the appeal period; 2) the present case must have been pending before the PUC on July 10 because no party had appealed as of that date; because no appeal had been taken, this court did not have jurisdiction and, consequently, the PUC must still have had jurisdiction; 3) petitions for reconsideration had been filed and, on July 10, the PUC had authority to grant those petitions; although the PUC later denied the petitions, its continuing authority to take action impacting on the case leads inexorably to the conclusion that the case was pending; and 4) the terms of the June 27 order make clear the pendency of the case, i.e., the order specifically left open the record subject to PUC approval of tariffs to be submitted by PECO; because the PUC did not actually approve the tariffs submitted by

PECO until July 25, 1986,[7] the case must have been pending on July 10.

In support of their position, Petitioners rely heavily on Groff v. Township of Ulster, 65 Pa. Commonwealth Ct. 584, 442 A.2d 1255 (1982) and Barasch v. Pennsylvania Public Utility Commission, 507 Pa. 430, 490 A.2d 806 (1985). However, as our discussion shall make clear, neither case mandates the result sought by Petitioners and, in fact, application of the proper legal principles mandates our affirmance of the PUC's decision not to apply §1323.

We begin by noting that an action is pending until a final adjudication has been issued. Robinson Township School District v. Houghton, 387 Pa. 236, 128 A.2d 58 (1956). Thus, the true inquiry here is whether the PUC order of June 27 was a final adjudication. A final adjudication is traditionally embodied in a final order of a court or administrative agency. In the present case, the order in question has all the earmarks of a final order: "A final order is one that: (1) ends the litigation, or alternatively, disposes of the entire case; or (2) has the practical consequence of putting the litigant 'out of court.'" 1 Darlington, McKeon, Schuckers and Brown, Pennsylvania Appellate Practice §341:2 (footnotes omitted). The PUC order of June 27 ended the "litigation" and put the parties "out of court." With these principles in mind, we shall address Petitioners' arguments, including their reliance on Groff and Barasch.

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[7]The docket entries in this proceeding reveal that the investigation was closed on July 25, 1986.

Petitioners first argue that a case is pending until its final disposition on appeal or, if no appeal is taken, at the end of an appeal period. We cannot agree. Petitioners' logic would have the effect of keeping every case "open" throughout the appeal period, regardless of whether an appeal is actually taken. Petitioners rely almost exclusively on the Groff decision to support this thesis. Although one sentence in Groff does support Petitioners' analysis, careful review of the opinion and the precedents it relies upon make clear that Groff is not intended to stand for the proposition urged by Petitioners.

In Groff, this court stated that intervention pursuant to Pa. R.C.P. 2327 was permitted only during the pendency of an action. Thus, we affirmed the trial court's denial of a petition to intervene filed subsequent to the final disposition of the case in the lower court. The final order of the lower court was entered on May 29, 1980, with the appeal period ending on June 28, 1980. The petition to intervene was not filed until July. In an unfortunate choice of language, perhaps designed to indicate the hopeless tardiness of the petition to intervene, we stated:

> Pendency is the state of an action after it has been begun and before the final disposition of it. The action in the instant case had been finally disposed of and concluded on June 28, 1980, following the end of the appeal period applicable to the lower court's decree absolute of May 29, 1980. The petition to intervene was not filed until July 8, 1980, at which time there was no proceeding pending . . . .

65 Pa. Commonwealth Ct. at 587, 442 A.2d at 1256.

This court relied on three precedents in support of this conclusion, namely, Robinson Township; Howell v. Franke, 393 Pa. 440, 143 A.2d 10 (1958); and Admiral Homes, Inc. v. Floto Management Corp., 397 Pa. 509, 156 A.2d 326 (1959). In Robinson Township the Pennsylvania Supreme Court stated:

> We are aware that each of two commentaries on our Rules of Civil Procedure expresses the opinion that, for the purpose of intervening, an action is pending from the moment it is first brought until the record of the action is removed on appeal. Neither cites any authority for the dictum whose inherent error is patent, upon a moment's reflection, and does not require further discussion.

387 Pa. at 241-42, 128 A.2d at 61. It cannot be argued that the Robinson Township opinion supports the quoted Groff language. Howell and Admiral Homes merely reiterate the principle that Pa. R.C.P. 2327 allows intervention only during the pendency of an action; thus, after final adjudication such an application comes too late. Howell, 393 Pa. at 443, 143 A.2d at 11; Admiral Homes, 397 Pa. at 511, 156 A.2d at 327-28. None of these decisions supports the proposition that a case is pending until final disposition on appeal. In fact, Robinson Township states that such a proposition is patently erroneous. Thus, to the extent that Groff supports such a proposition, it is overruled.

Petitioners next argue that the case must have been pending before the PUC on July 10 because no appeal had yet been taken. We do not agree. As noted earlier, the true issue here is whether the PUC issued a final order on June 27. The existence

of, or lack of, an appeal from that order does not answer the question of whether the order was final. Petitioners assert that this court did not yet have jurisdiction, which is true, but it does not necessarily follow that the PUC retained jurisdiction. In fact, the PUC relinquished its jurisdiction by issuing a final order.

Petitioners next argue that because petitions for reconsideration had been filed, both before and after the new law became effective, and because the PUC had authority to grant those petitions, the case was, necessarily, pending before the PUC. Again, we do not agree. If the PUC had granted the petitions for reconsideration, it would have been reasserting its jurisdiction over the matter. The PUC chose not to do so. Although it cannot be disputed that petitions for reconsideration were pending before the PUC, the case was not pending.[8]

Finally, Petitioners argue that the very terms of the order demonstrate its lack of finality. Petitioners direct us to paragraph 10 of the June 27 order, which states that the investigation shall terminate and the record be closed upon PECO's filing of, and the PUC's approval of, tariff revisions. We note that paragraph 5 of the order directs PECO to "file detailed calculations with the tariff filing which shall demonstrate to the [PUC's] satisfaction that the filed rates comply with this Opinion

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[8]We find the parties' discussion of Pa. R.A.P. 1701 to be irrelevant. Rule 1701 deals with the authority of trial courts and agencies after an appeal has been taken. Appeals from the PUC June 27 order were not taken until after reconsideration was denied on July 25, 1986.

and Order." Also, paragraph 2 of the order authorizes PECO to file tariffs or tariff supplements designed to produce a $351 million[9] annual revenue increase to be phased in over a three year period.

Petitioners argue that the June 27 order demonstrates, on its face, that the case was pending before the PUC. We recognize some merit in this argument. However, the fact that the record was not officially closed does not change our conclusion that the PUC order of June 27 was a final one. "[T]he finality of an order is a 'judicial conclusion' that can be reached only after all examination of the order's ramifications. In so doing, the court will look beyond the technical effect of the adjudication and base its decision on the practical effect." 1 Darlington, McKeon, Schuckers and Brown, Pennsylvania Appellate Practice §341:2. See Praisner v. Stocker, 313 Pa. Superior Ct. 332, 337, 459 A.2d 1255, 1258 (1983) and cases cited therein and Bell v. Beneficial Consumer Discount Co., 465 Pa. 225, 348 A.2d 734 (1975).

Review of the PUC's June 27 order establishes that the only matter left "open" was PECO's calculation of the tariffs which would provide the increase allowed by the PUC. There is no dispute that the June 27 order granted an increase in rates to PECO. Furthermore, the amount of the increase was determined and the time-frame for the increase was established. The only remaining matter was the calculations which would yield the rate

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[9]This figure is rounded up. The specific increase was $350,797,000.

increase allowed. Thus, the order finally determined the issue which brought the matter before the PUC, i.e., PECO's request for an increase in rates. Thus, we conclude that the June 27 order[10] was a final order.[11] Accordingly, the case was not pending before the PUC on July 10, 1986 and §1323 was not applicable.

We turn now to Petitioner's other arguments to this court, which can be summarized as follows: 1) the PUC erred in finding that the Limerick I plant is used and useful; accordingly, the PUC erred in allowing PECO to include part of the costs of the Limerick I plant in its rate base; 2) the PUC erred in departing from its own precedents without explanation; and 3) the PUC erred

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[10]PECO points out that June 27, 1986 was the last date upon which a final order could be issued in order to prevent PECO's proposed rate from going into effect. See 66 Pa. C.S. §1308(d).

[11]Our conclusion is supported by the Pennsylvania Supreme Court's decision in Barasch. Although Petitioners assert that Barasch requires the application of §1323, that decision in fact operates against Petitioners assertion. In Barasch, this court held that §1315 of the Code was inapplicable because its language did not manifest a legislative intent that it be applied retroactively. Green v. Pennsylvania Public Utility Commission, 81 Pa. Commonwealth Ct. 55, 69-70, 473 A.2d 209, 217-218 (1984), aff'd sub nom. Barasch v. Pennsylvania Public Utility Commission, 507 Pa. 430, 490 A.2d 806 (1985). Although the supreme court affirmed, it specifically held that the language of §1315 was plain and unambiguous and was intended to be retroactively applied. 507 Pa. at 438, 490 A.2d at 810. However, in enacting §1315 the legislature stated that it was "applicable to all proceedings pending before the Public Utility Commission and the courts at this time." Section 1315 became effective on December 20, 1982. At that time, appeal to this court had been perfected. See Green, 81 Pa. Commonwealth Ct. at 57, 473 A.2d at 212. In contrast to the language used by the legislature in enacting §1315, the section presently at issue does not manifest a legislative intent that it be applied retroactively. Section 1323 was made expressly applicable only to cases pending before the commission, not those pending before the courts.

in basing its conclusion of used and useful solely on its finding that no excess generating capacity was created by Limerick I. We shall address these issues in order, following a brief recitation of facts and law which provide the background of the present appeal.

Limerick is a nuclear electric generating station. 61 Pa. PUC at 594-95. It is composed of Limerick I and Limerick II. Id. at 595. Limerick I went into actual commercial operation in February of 1986, while construction of Limerick II had not yet been completed at the time of June 27, 1986 PUC decision. Id. Both units of the Limerick project will use a common plant. Id.

We begin by noting that if a plant is not used and useful it will not be included in a utility's rate base. Pennsylvania Power & Light v. Pennsylvania Public Utility Commission, 101 Pa. Commonwealth Ct. 370, 516 A.2d 426 (1986). As we stated in Pennsylvania Power & Light, the PUC has wide discretion in the area of adjustments to rate base. 101 Pa. Commonwealth Ct. at 376, 516 A.2d at 430 (quoting UGI Corp. v. Pennsylvania Public Utility Commission, 49 Pa. Commonwealth Ct. 69, 79, 410 A.2d 923, 929 (1980)). Petitioners contend that the PUC erred in finding that Limerick I is used and useful and therefore erred in allowing Limerick I to be included in PECO's rate base. Specifically, Petitioners argue that the PUC's determination of used and useful was based on its finding that Limerick I did not create excess generating capacity, and Petitioners assert that that finding ignores almost all the evidence. Our scope of review is limited to a determination of

whether an error of law has been committed, constitutional rights have been violated or if there is substantial evidence to support findings, determinations or the order of the PUC. Carbonaire Company, Inc. v. Pennsylvania Public Utility Commission, ____ Pa. Commonwealth Ct. ____, ____ A.2d ____ (No. 2874 C.D. 1986, filed February 29, 1988).

One aspect of Petitioners' argument is that the PUC ignored evidence that, before Limerick I went into operation, PECO attempted to sell its share of another nuclear plant (Salem 2)[12] to other utilities, and that the PUC also ignored evidence that PECO prematurely retired combustion turbines producing 458 megawatts. Petitioners assert that these figures conclusively establish PECO's excess generating capacity. According to Petitioners, if PECO could afford to give up this much power, it must have had excess generating capacity. Our review of the record demonstrates that the PUC did not ignore evidence and that its finding is supported by substantial evidence.

In its decision, the PUC stated:

> The ALJ has concluded that, with Limerick on line, PECO has a reserve margin of 28% over peak requirements. He notes that this is 3% greater than the Company's planning objective of 25%, but since base load capacity is not added megawatt by megawatt a "reasonable increase in reserve capacity must be allowed before excess capacity comes into play" (R.D. page 74). The ALJ finds that the record in this case fails to substantiate any PECO excess capacity.
>
> We agree with and adopt ALJ Matuschak's recommendation on this issue. Accordingly, we

[12]PECO's share of Salem 2 comprises 471 megawatts.

> will not make any of the adjustments proposed by the various Complainants here.

61 Pa. PUC at 615. The PUC thoroughly reviewed the retirement issue and, noting that the two combustion turbine units in question were 35 and 38 years old, agreed with the ALJ that they were not prematurely retired.[13] The PUC then expanded on the ALJ's reasoning, and stated that OCA's exception to the ALJ's resolution of the retirement issue ignored the purpose which the combustion turbines were intended to serve. PECO asserted to the PUC that the combustion turbine capacity was intended only as an interim measure until new baseload capacity could be built. Our review establishes that what Petitioners are so arduously contesting is the PUC's acceptance of PECO's evidence on the retirement issue. The PUC decision makes clear that substantial evidence supports its finding on retirement of the combustion turbines. Accordingly, we reject Petitioners arguments on this issue. See Philadelphia Electric Company v. Pennsylvania Public Utility Commission, 61 Pa. Commonwealth Ct. 325, 331, 433 A.2d 620, 624 (1981).

With regard to the attempted sale issue, we note that Petitioners do not assert that PECO actually sold its share of Salem 2, merely that such a sale had been attempted. Although we would be assisted in our review if the PUC had expressly discussed this attempted sale, we believe the PUC decision adequately addressed the issue. As noted above, the ALJ concluded that the

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[13]The ALJ stated, and the PUC agreed, that PECO routinely projects a 35 year life for units such as those at issue here. 61 Pa. PUC at 614.

operation of Limerick provided PECO with a reserve margin of 28% over peak requirements, and that such a reserve capacity did not constitute excess capacity. 61 Pa. PUC at 615. The PUC accepted and adopted the ALJ's recommendation on this issue. Id. The PUC's conclusion of no excess capacity obviously negates Petitioners' assertion that excess capacity existed, and this is true regardless of Petitioners' allegations as to what created the non-existent excess capacity. Thus, we are not persuaded by Petitioners' argument on this issue.

Petitioners next argue that the PUC erred in departing from its own precedents without explanation. However, Petitioners' entire argument is based on the thesis that in prior cases where excess capacity was found to exist, the PUC has made an adjustment in rates.[14] Thus, Petitioners' argument is premised on their assertion that the PUC erred in concluding no excess capacity existed. Inasmuch as we have upheld the PUC's

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[14]Petitioner OCA stated in its brief:

> The Commission has considered many times whether an electric utility had excess generating capacity. In four of those cases, the Commission found that excess capacity existed and ordered an adjustment to rates. In the others, the Commission found, for various reasons, that the utilities did not have excess capacity. In no case, however, has the Commission found that excess capacity existed, yet failed to make an adjustment to rates. Further, in all of those cases, the Commission fully considered its prior decisions, and applied those precedents to the facts of the case.

OCA's brief at 41.

finding on the excess capacity issue, we need not address Petitioners' departure from precedent issue.

We turn now to the final issue raised by Petitioners, namely, the assertion that the PUC based its conclusion of used and useful solely on its finding that no excess generating capacity was created by Limerick I, and that this was error. Petitioners point out that a great deal of the used and useful litigation to date has revolved around the question of whether excess generating capacity has been created. See, e.g., Pennsylvania Power & Light. Petitioners assert, however, that the PUC decision at issue stands for the proposition that if no excess generating capacity is found to exist, then a plant will, per se, be deemed to have met the used and useful standard. Thus, according to Petitioners, a utility could install Persian rugs in its offices or purchase a fleet of Cadillacs for its meter readers and still pass along the costs because such items could easily meet the used and useful definition. We disagree.

"[T]he term 'used and useful', as applied to a utility's return on its investment, is codified in Section 1310(d) of the Public Utility Code [66 Pa.C.S. §1310(d)], which provides that a utility is entitled to 'a fair return upon the fair value of the property of such public service.'" Pennsylvania Power & Light Co., 101 Pa. Commonwealth Ct. at 377, 516 A.2d at 430. It is established that "the 'touchstone for determining whether or not a prudently constructed unit should be included' in a utility's rate base is whether or not, during the last year involved, the unit will be used and useful in rendering service to the public.'"

Id. at 376, 516 A.2d at 430, (quoting Philadelphia Electric Co., 61 Pa. Commonwealth Ct. at 329, 433 A.2d at 623). Furthermore, our decisions make clear that if the PUC reasonably concludes that property is not used or useful in serving the public, then that property cost will not be passed on to ratepayers. Philadelphia Electric Co., 61 Pa. Commonwealth Ct. at 329, 433 A.2d at 623. Thus, we trust that the PUC would not find Persian rugs or a fleet of Cadillacs to be used and useful to the public.

The PUC argues in its brief that the argument being advanced by Petitioners stems from the PUC's rejection of Petitioners' suggested used and useful analysis. Petitioners argued to the PUC, and now argue to this court, that a cost/benefit life cycle analysis of Limerick I should have been employed. The PUC specifically addressed and rejected Petitioners suggested analysis:

> The OCA and UUC/UP have complained in their Exceptions that the Recommended Decision has ignored their Limerick life cycle analyses which purport to show that the unit will produce no positive benefit over its useful life (OCA Exceptions, p. 18, UUC/UP Exceptions, p.9.)
>
> We find, however, that such analyses are of limited value in light of our determination that the record evidence will not support a finding of excess capacity. A nuclear plant life cycle analysis must be based, in part, upon assumptions and speculative projections which can be the subject of wide disagreement. We are inclined to agree with PECO that such studies are not directly relevant to our inquiry here, since we have already determined that the Limerick I capacity is needed (PECO Reply Exceptions, p.31).

61 Pa. PUC at 615. As noted earlier, the PUC has wide discretion in making adjustments to rate bases. We cannot conclude that the PUC erred in employing the lack of excess generating capacity as a basis for its decision. We do not, of course, hold that the lack of excess generating capacity is, per se, sufficient to meet the used and useful standard.[15] We hold only that, in this case, the PUC did not err in finding the Limerick I plant to be used and

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[15]Similarly, in the Pennsylvania Power & Light case we refused to hold that the presence of excess generating capacity resulted in an automatic exclusion from the used and useful definition:

> We note that, in the proper case, it may be possible that a new generating plant is 'used and useful' despite the fact that its capacity is not immediately needed to insure that a utility has an adequate reserve capacity. The case at bar, however, is not such a case because, under any standard, the capacity PP & L possesses beyond that necessary for its reserve requirements is not used and useful.

101 Pa. Commonwealth Ct. at 379, 516 A.2d at 431.

useful.[16] Accordingly, we affirm the PUC's finding on that issue.

NO. 2279 C.D. 1986

In this case, PECO appeals the PUC order affirming the ALJ's grant of the Commission Prosecutory Staff's (Trial Staff) motion in limine to strike PECO's evidence on the reasonableness of its decisions to delay construction on the Limerick plant.[17]

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[16]We note that the present decision is in accord with the PUC'S earlier interpretation of the word "useful," which we accepted in the Pennsylvania Power & Light Company case:

> In the instant case, the Commission has interpreted the word "useful" as requiring that:
>
> > the plant and its associated capacity contribute no more than necessary to system reliability in the accepted, technical sense. In other words, the question is whether the Company's total capacity, including the plant in question, is commensurate with the requirements for peak demand plus a reasonable reserve margin relative to the Company's own system and to its PJM obligation.

101 Pa. Commonwealth Ct. at 377, 516 A.2d at 431 (quoting Commission's Opinion at p. 17).

[17]The ALJ's ruling was issued on December 20, 1985 and stated: "[Trial] staff's motion that we determine that the Commission's prior findings at I-80100341 [Re Limerick Nuclear Generating Station, 56 Pa. PUC 47 (1982)] that Philadelphia Electric Company's decisions in 1976 and 1978 to delay Limerick construction were unreasonable are conclusive upon the parties in this proceeding is hereby granted." Quoted in 61 Pa. PUC at 607. The PUC affirmed the ALJ's ruling, on interlocutory review, on January 21, 1986. The January 21, 1986 order is properly before us because it was interlocutory and, as such, did not become appealable until the PUC's final order of June 27, 1986.

The PUC reasoned that because it had issued a prior opinion and order which conclusively determined the issue of the reasonableness of the delays, PECO should not be given an opportunity to relitigate the issue. As the PUC stated in its June 27, 1986 opinion:

> [T]he issue in this proceeding is not the prudence or reasonableness of the Company's actions, but rather to determine if the decisions, made in 1976 and 1978 to delay completion of Limerick 1, resulted in an unreasonable escalation in the cost of that unit. If we find that unreasonable costs were incurred as a result of the construction delays, we then have the task of quantifying the impact of those imprudent management actions upon the Company's customers.

61 Pa. PUC at 607.

The PUC went on to find that unreasonable costs were incurred because of the delays and reduced PECO's requested rate increase accordingly. 61 Pa. PUC at 607-613.

PECO asserts that the PUC's refusal to allow PECO to present its evidence on the reasonableness of delay was erroneous because, PECO argues, the earlier decision did not, in fact, conclusively determine the issue. We are constrained to agree.

While we applaud the PUC's foresight in initiating an investigation prior to a request from PECO to include Limerick costs in its rate base,[18] we believe a recent decision of our supreme court governs our resolution of this issue. The PUC decision in Re Limerick Nuclear Generating Station was appealed to

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[18] See 56 Pa. PUC at 50.

this court and then to the supreme court.[19] The focus of both our opinion and the supreme court opinion was the parameters of PUC authority with respect to its involvement in utility decision making. However, the supreme court did make reference to the reasonableness issue, stating as follows:

> Further, the opinion accompanying the PUC's order contained criticism, of an advisory nature, directed at PECO's decision in 1976 and 1978 to defer completion of the Limerick facilities. Such mere criticism, however, does not constitute an adjudication and cannot be reviewed on appeal.

Pennsylvania Public Utility Commission v. Philadelphia Electric Co., 501 Pa. 153, 161 n.7, 460 A.2d 734, 739 n.7 (1983).

The parties have raised numerous issues, including the applicability of collateral estoppel, distinctions between adjudications and findings or conclusions, and the requirements of due process. As we have concluded that a remand is necessary, we will address these issues only insofar as necessary to support our conclusion.

The PUC relies heavily on an earlier PECO case, Philadelphia Electric Co. v. Pennsylvania Public Utility Commission, 61 Pa. Commonwealth Ct. 325, 433 A.2d 620 (1981), in support of its argument that collateral estoppel bars PECO's attempted relitigation of the reasonableness issue. We find the case inapposite. In the 1981 PECO case, a prior rate case had established the fact sought to be relitigated. 61 Pa.

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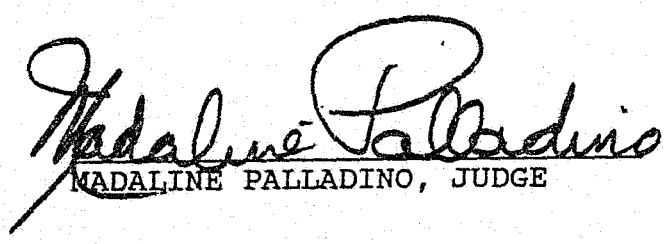
[19] Philadelphia Electric Co. v. Pennsylvania Public Utility Commission, 71 Pa. Commonwealth Ct. 424, 455 A.2d 1244 (1983), rev'd Pennsylvania Public Utility Commission v. Philadelphia Electric Co., 501 Pa. 153, 460 A.2d 734 (1983).

Commonwealth Ct. at 337, 433 A.2d at 624. In the present case, we do not have a prior rate proceeding before the PUC. The Re Limerick decision does contain discussion of PECO's delay decisions. However, our review of that decision persuades us that the discussion is, in fact, "mere criticism" and does not support the PUC's exclusion of PECO's evidence on the issue.

Our conclusion is based on a myriad of factors, including the fact that the order issued in Re Limerick does not even mention the delay decisions. 56 Pa. PUC at 70-71. The order focuses exclusively on issues relating to construction of Limerick II. Thus, as noted by the supreme court, there was no adjudication of the reasonableness issue. Inasmuch as the present proceeding led to an adjudication, it was error for the PUC to exclude PECO's evidence on reasonableness.

Accordingly, we remand this case to the PUC for a hearing and adjudication on the limited issue of the reasonableness of PECO's delay decisions.



MADALINE PALLADINO, JUDGE

DAVID M. BARASCH, CONSUMER ADVOCATE, Petitioner v. PENNSYLVANIA PUBLIC UTILITY COMMISSION, Respondent	:	IN THE COMMONWEALTH COURT OF PENNSYLVANIA NO. 2248 C.D. 1986
UNIVERSITY OF PENNSYLVANIA/ UTILITY USERS COMMITTEE, INC., Petitioner v. PENNSYLVANIA PUBLIC UTILITY COMMISSION, Respondent	:	IN THE COMMONWEALTH COURT OF PENNSYLVANIA NO. 2269 C.D. 1986

O R D E R

AND NOW, March 31, 1988, the Pennsylvania Public Utility Commission order of June 27, 1986, insofar as appealed from in No. 2248 C.D. 1986 and No. 2269 C.D. 1986, is affirmed.

Madaline Palladino

MADALINE PALLADINO, JUDGE

PHILADELPHIA ELECTRIC COMPANY, Petitioner	:	IN THE COMMONWEALTH COURT OF PENNSYLVANIA
v.	:	
PENNSYLVANIA PUBLIC UTILITY COMMISSION, Respondent	:	NO. 2279 C.D. 1986

O R D E R

AND NOW, March 31, 1988, the above-captioned case is remanded for a hearing and adjudication on the issue of the reasonableness of Philadelphia Electric Company's delay decisions.

Jurisdiction relinquished.

Madaline Palladino

MADALINE PALLADINO, JUDGE

CERTIFIED FROM THE RECORD
AND ORDER EXIT

MAR 31 1988

Deputy Prothonotary - Chief Clerk

2574 Dic

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
P. O. BOX 3265, HARRISBURG, Pa. 17120

April 4, 1986

IN REPLY PLEASE
REFER TO OUR FILE

Jerry Rich, Secretary
Pa. Public Utility Commission
Post Office Box 3265
Harrisburg, PA 17120

Re: Pennsylvania Public Utility Commission
v.
Philadelphia Electric Company
Docket No. R-850152

Dear Secretary Rich:

Enclosed please find an original and nine (9) copies of Commission Trial Staff's Main Brief for filing in the above-captioned matter. Copies are being served on the Administrative Law Judge by Federal Express mail, and all active parties of record in accordance with the enclosed Certificate of Service.

Very truly yours,

Marlene R. Chestnut
Assistant Counsel
For Commission Trial Staff

Enclosures

MRC:gdp

cc: Honorable Joseph P. Matuschak
All Active Parties of Record

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

ADMINISTRATIVE LAW JUDGE JOSEPH P. MATUSCHAK PRESIDING

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PHILADELPHIA ELECTRIC COMPANY

DOCKET NO. R-850152

COMMISSION TRIAL STAFF MAIN BRIEF

Investigation upon Commission Motion into Supplement No. 15 to Tariff Electric-Pa.P.U.C. No. 26, pursuant to Section 1308 of the Public Utility Code, 66 Pa. C.S. §1308.

Marlane R. Chestnut
Assistant Counsel

Veronica A. Smith
Assistant Counsel

Daniel P. Delaney
Deputy Chief Counsel

For the Trial Staff of the
Pennsylvania Public Utility Commission

Pennsylvania Public Utility Commission
P.O. Box 3265
Harrisburg, PA 17120
(717) 783-2804

Dated: April 7, 1986

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I. INTRODUCTION

On September 27, 1985 the Philadelphia Electric Company (hereinafter referred to as PECO or the company) filed Supplement No. 15 to its Tariff Electric-Pa. P.U.C. No. 26 to become effective November 27, 1985. This supplement was designed to produce an annual base rate increase of approximately $941 million, based upon an adjusted level of operations using a historic test year ended June 30, 1985 and a future test year ending June 30, 1986. The filing also contained data purporting to establish that the inclusion of Limerick No. 1 in PECO's base rate would result in a 2-year average anticipated energy savings of $207 million, which, theoretically, would be realized in PECO's energy cost rate - if the Limerick Unit No. 1 performed at a certain capacity level. Absent such performance, the savings would not materialize or, if performance was greater than projected, the savings could be greater. In any event the savings are not guaranteed by PECO. The problems associated with the theoretical savings were made evident during the course of the proceedings when the anticipated amount of projected savings fluctuated from one testimony submission to the next submission. By the close of the record, no final number could be discerned.

The Commission by order entered November 1, 1985 allowed the filed Supplement No. 15 to be suspended by operation of law until June 27, 1986 and instituted this investigation at Docket No. R-850152. Commission Trial Staff filed its Notice of Appearance on November 5, 1985.

Complaints were filed by the Office of Consumer Advocate (OCA), Philadelphia Area Industrial Energy Users Group (PAIEUG), Governor's Energy Council (GEC), City of Philadelphia (City), Utility Users Committee and University of Pennsylvania (UUC/UP), Pennsylvania Business Users Group (PBUG), Consumers Education and Protection Association (CEPA), General Services Administration (GSA) and SEPTA/AMTRAK.

On October 30, 1985 the Commission entered its order in Docket No. M-840375, et al. (ECR-No. 8 Investigation) which directed that PECO's ECR would be revised in its format. The Commission's order applied the 80/20 rule to the fuel component of PECO's costs. Pursuant to the 80/20 split 20 percent of PECO's anticipated fuel costs would be included in base rates while 80 percent would be recovered through the ECR pursuant to 1307(e) of the Public Utility Code, 66 Pa. C.S. §1307(e). PECO was directed to submit the necessary documentation for the implementation of the 80/20 split in the instant proceeding.

A prehearing conference was held on December 3, 1985 before Administrative Law Judge Joseph P. Matuschak. Subsequent to the prehearing conference, thirty-three (33) days of evidentiary hearings were held in Philadelphia and Harrisburg with a total of 5,200 transcript pages. In addition, public input session were held at Media, Doylestown and Philadelphia. PECO presented thirty-four (34) direct statements, seventy (70) written rebuttal and sur-surrebuttal statements as well as a number of oral sur-

surrebuttal statements. These statements were sponsored by thirty-eight (38) witnesses.

Staff's case consisted of fourteen direct statements and nine rebuttal and surrebuttal statements as submitted by fourteen witnesses. Testimony on the issues of revenue requirements (Limerick and Non-Limerick) also was proffered through seven OCA witnesses as well as statements from PAIEUG, GEC, City, GSA, and UUC/UP. Rate structure witnesses were sponsored by OCA, PAIEUG, GSA, UUC/UP, City, PFMA, PBUG, CEPA and SEPTA/AMTRAK.

The record closed on March 17, 1986 except for the admission of certain exhibits which were submitted by PECO and Staff pursuant to the agreement of the parties.

II. THE PUBLIC UTILITY CODE MANDATES THAT A PUBLIC UTILITY HAS THE BURDEN OF PROOF TO ESTABLISH THE JUSTNESS AND REASONABLENESS OF PROPOSED RATES.

The general rule for allocating the burden of proof in proceedings before Administrative Law Judges and the Commission is set forth in Section 332(a) of the Public Utility Code, 66 Pa. C.S. §332(a), which provides:

> Except as may be otherwise provided in section 315 (relating to burden of proof) or other provisions of this part or other relevant statute, the proponent of a rule or order has the burden of proof.

The above-mentioned Section 315 of the Public Utility Code, 66 Pa. C.S. §315, provides in pertinent part:

> (a) Reasonableness of rates.-
>
> In any proceeding upon the motion of the commission, involving any proposed or existing rate of any public utility, or in an proceedings upon complaint involving any proposed increase in rates, the burden of proof to show that the rate involved is just and reasonable shall be upon the public utility. . . .

Pursuant to the requirements of this Section 315(a), the instant Supplement No. 15 to Tariff Electric-Pa. P.U.C. No. 26, must be shown by the utility to be establishing rates that are just and reasonable. The statute places this burden for a proposed rate increase squarely on the utility, and the evidence adduced by the utility must be substantial. Lower Frederick Township Water Co. v. Pennsylvania Public Utility Commission, 48 Pa. Commonwealth Ct. 222, 409 A.2d 505 (1980). The mere filing of data, as required by the

Commission's standard filing requirements at 52 Pa. Code §53.53, does not meet this burden. This burden of proof to establish that the proposed rates are just and reasonable does not shift at any point to another party. Berner v. Pennsylvania Public Utility Commission, 382 Pa. 622, 116 A.2d 738 (1955). In Berner, the Pennsylvania Supreme Court reversed the lower court's affirmation of a Commission decision (where the Commission found that the complainants against a proposed increase failed to present adequate, competent evidence that certain plant additions were improper, unnecessary or too costly) and held:

> [T]he appellants did not have the burden of proving that the plant additions were improper, unnecessary or too costly; on the contrary, that burden is, by statute, on the utility to demonstrate the reasonable necessity and cost of the installations and that is the burden which the utility patently failed to carry. (Berner, at 631).

See Pennsylvania Public Utility Commission v. Laurel Pipe Line Co., 29 Pa. Commonwealth Ct. 351, 370 A.2d 1252 (1977); City of Johnstown v. Pennsylvania Public Utility Commission, 184 Pa. Superior Ct. 56, 133 A.2d 246 (1957), Citizens Water Company v. Pennsylvania Public Utility Commission, 181 Pa. Superior Ct. 301, 124 A.2d 123 (1956); Equitable Gas Company v. Pennsylvania Public Utility Commission, 160 Pa. Superior Ct. 458, 51 A.2d 497 (1947). In Equitable the Court affirmed the Commission's conclusion that:

> The burden of proof of justification of the proposed increased rates rests upon respondent under Section 132 of the Public Utility Law. The proof which will meet this burden. . . must amount to more than a scintilla of evidence or a plausible argument. Respondent, to discharge the burden, must present evidence not only by permitting but producing the conclusion that the increased rates are reasonable, and it is the duty of the Commission to reject the rates unless the proof clearly supports them.

Pennsylvania Public Utility Commission v. Equitable Gas Company, 25 Pa PUC 302, 304 (1945).

It should also be noted that adjustments made by other parties are not the same as a claim made by the company. Where PECO is claiming a certain amount for an item, Staff adjustments are intended to demonstrate why the item should be disallowed. A rejection of another party's claim does not render the utility's claim reasonable. Pennsylvania Public Utility Commission v. Equitable Gas Company, R-822133 (entered July 11, 1983). In Equitable, the Commission adjusted Equitable's claim for gas storage inventory and concluded:

> There is no presumption of reasonableness which attaches to a utility's claims, at least none which survives the raising of credible issues regarding a utility's claims. A utility's burden is to affirmatively establish the reasonableness of its claim. It is not the burden of another party to disprove the reasonableness of a utility's claims.

Order at 25 (emphasis added).

In the course of this proceeding, Staff and the Consumer Advocate have raised numerous issues questioning the reasonableness of PECO's claims. When a utility presents

a claim for rates to the Commission for consideration, the utility is compelled, by law, to establish the justness and reasonableness of such proposed rates. A mere restatement of the claim does not affirmatively establish the reasonableness of the claim and does not satisfy the burden of proof. This principle must guide the resolution of the Company's claims in this matter.

III. RATE OF RETURN

A. The Judicial Requirements of a Fair Rate of Return are Well Defined.

The calculation of the appropriate rate of return, particularly the determination of the common equity element, was a major issue in this proceeding. Although its quantification is subject to various methodologies and interpretations of financial data, the term's definition is not disputed. As explained in Garfield and Lovejoy's Public Utility Economics at 116 (1964):

> The rate of return is the amount of money a utility earns, over and above operating expenses, depreciation expense, and taxes, expressed as a percentage of the legally established net valuation of utility property, the rate base. Included in the "return" are interest on long-term debt, dividends on preferred stock, and earnings on common stock equity. In other words, the return is that money earned from operations which is available for distribution among the various classes of contributors of money capital. In the case of common stockholders, part of their share may be retained as surplus. The rate-of-return concept merely converts the dollars earned on the rate base into a percentage figure, thus making the item more easily comparable with that in other companies or industries. (emphasis in original)

The standards for determining the elements of a fair rate of return were described by the United States Supreme Court in Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia, 262 U.S. 679 (1923), where the Court stated:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. 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 maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally.

Id. at 692-3.

A reasonable rate of return was further described by the Court in Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944), in the following manner:

> [I]t is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. . . . By that standard the return to the equity owner should be commensurate with risks on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.

Id. at 603 (footnote omitted).

The Pennsylvania Supreme Court recently interpreted the Hope case in Pennsylvania Electric Co. v. Pennsylvania Public Utility Commission, _____ Pa. _____, 502 A.2d 130 (1985) appeal filed at 85-1493 (docketed in United States Supreme Court on March 7, 1986). In deciding whether the Hope case established a constitutional requirement that utility rates must be set at sufficiently high levels by regulatory authorities to guarantee the utility's financial integrity irrespective of counterveiling consumer interests, the Court stated:

> In summary, therefore, we hold that the Hope decision is to be interpreted as recognizing a constitutional requirement of "just and reasonable" utility rates, providing a return on used and useful property, with rates to be determined through a balancing of consumer and investor interests. The legitimate areas of investor concern, enumerated in Hope, are not, however, of constitutional dimension, but are among the factors to be taken into account in the balancing of interests process.

_____ Pa. at _____, 502 A.2d at 135-6 (footnote omitted). The staff submits that its rate of return recommendation in this matter, sponsored by Staff witness Andrew R. O'Donnell[1/], comports fully with these judicial requirements.

1/ Fixed Utility Financial Analyst, Finance Division, Bureau of Rates, Pennsylvania Public Utility Commission.

B. Summary Of Staff's Position

The Staff's position on the fair rate of return for the Company is advanced in Staff witness O'Donnell's Direct, and Updated and Surrebuttal testimonies (Trial Staff Sts. ARO-1, and ARO-2) and the accompanying exhibits (Trial Staff Exs. ARO-1, ARO-2A and ARO-2B). This position can be summarized in the following manner.

1. Capital Structure and Debt Cost Rates

The Company's claimed capital structure and effective cost rates of debt and preferred stock were not disputed by the Staff in this proceeding since Trial Staff witness O'Donnell found them to be properly calculated. (Trial Staff St. ARO-1, p. 1). The Company's claimed capital structure and cost rates were updated in Company witness Brennan's Updated and Rebuttal Testimony to reflect the Company's altered financing plans (PECO St. 28B, p. 6). These revised numbers were accepted by the Staff.[2/]

2. Rate of Return on Common Equity

Staff witness O'Donnell calculated the required rate of return on common equity using both discounted cash flow

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2/ It should be noted however that the Staff does except to the proposed tax treatment of the $51.2 million premium paid partially in December 1985 in connection with the tender offer of First Mortgage Bonds in December 1985 and also to be used to finance the proposed call of First Mortgage Bonds in July, 1986. See Note 10 to Updated Schedule 4 of PECO Ex. JFB-3. This will be discussed in the tax section of the brief.

and risk spread methodologies. These calculations are detailed in Trial Staff St. ARO-1, pages 10-18 (DCF) and 18-19 (risk spread) and updated in Trial Staff St. ARO-2. Mr. O'Donnell's updated recommendation on the required rate of return on common equity was the lower half of a 14.0 to 15.0 percent range (Trial Staff St. ARO-2, page 6).

3. Staff's Rate of Return Recommendation

	CAPITAL STRUCTURE RATIO (%)	REQUIRED COST/ RETURN RATE (%)	WEIGHTED AVERAGE REQUIRED COST/ RETURN RATE (%)
LONG-TERM DEBT	50.90	10.86	5.53
PREFERRED STOCK	10.70	10.50	1.12
COMMON EQUITY	38.40	14.0-15.0	5.38-5.76
TOTAL	100.00		12.03-12.41
			Use 12.12(a)

(a) based on the midpoint (14.25%) of Mr. O'Donnell's updated recommendation of the lower portion of his original 14.0-15.0% range.

Source: Updated Schedule 1 to Trial Staff Ex. ARO-2B.

C. Staff's Position Is Reasonable And Should Be Adopted By The Presiding Officer.

The Staff submits that its position on the fair rate of return for the Company is based on Commission approved methodologies and is consistent with prevailing economic conditions. The Trial Staff's rate of return recommendation

is a reasonable one, balancing both the interests of the Company's shareholders and ratepayers, and therefore should be adopted by the Presiding Officer.

Determinations as to the allowed cost rates of common equity were historically premised on the theory that a fair rate of return to a public utility should correspond to the return being earned by companies of similar risk. Over time, cost of capital based determinations have become preferred. This approach holds that if a utility is able to compete successfully in the market for capital and can do so without impairing its financial integrity, then a return based on the cost of capital to the company is fair and reasonable. This shift is apparent in the Commission's gradual decision to place less reliance upon the earnings/price and similar comparative risk methodologies in favor of discounted cash flow (DCF), base rent and other analyses which look to market data to derive the cost of equity capital. In its recent opinion and order in Pennsylvania Public Utility Commission v. Western Pennsylvania Water Co. at R-850096 (adopted and entered January 29, 1986), the Commission concluded at page 80 that the DCF and risk premium analyses present positive and material evidence which it should consider in reaching its equity cost determinations. The Staff's recommendation is the product of such analyses along with a consideration of prevailing economic conditions.

1. Overview of Electric Utility Industry

In his direct testimony, Staff witness O'Donnell provided an overview of the electric utility industry that focused on the economic factors that influenced the required rate of return on common equity. (Trial Staff St. ARO-1, p. 2-4). Mr. O'Donnell noted that the industry enjoyed a period of low, stable interest rates from 1901 to 1965 but that from 1966 to 1982, interest rates spiraled from 5.5 to 16.2 percent. Since 1982, interest rates have declined and are expected to continue their downward trend.

The Electric Utility industry was significantly effected by the rising interest rates, particularly those engaged in large construction programs. Rapidly escalating operating and financing costs coupled with reduced electrical demand stemming from lower industrial production and consumer conservation weakened the financial position of many electrical utilities. The financial condition of many of these utilities has improved in the recent past, in part from the easing of inflation, the completion of large construction programs and reduced regulatory lag in the processing of requests for rate relief. (Trial Staff St. ARO-1, p. 2-3).

In witness O'Donnell's opinion, some of these factors will work to improve PECO's financial condition. The declining interest rates along with the inclusion of Limerick Unit I into rate base will have positive effects on the Company's financial condition. However this potential for improvement is balanced

by the resumption of construction at Limerick Unit 2 which will require significant external financing. On balance, the prospect for significant improvement in the Company's financial condition in the near term is not good. (Trial Staff St. ARO-1, p. 4)

2. Barometer Group and Examination of Key Ratios.

As a standard check on the accuracy of his common equity return estimation methodologies, Mr. O'Donnell selected a barometer group of electric utilities based on similar investment risk, common stock characteristics, geographic proximity and similar bond issuances.[3/] Schedule 2 of Trial Staff Ex. ARO-1 demonstrates that the barometer group shares with PECO similar stock price stability and price growth persistence, capital structures, interest coverage ratios and amount of AFUDC as a percentage of net earnings. The bond ratings of the barometer group and PECO are also similar (Trial Staff St. ARO-1, p. 7).

Mr. O'Donnell then examined a number of key ratios for PECO and the barometer group that directly affect the required rate of return on common equity. Mr. O'Donnell also included in his comparisons data for Moody's 24 Public Utilities, which is representative of the electric utility industry. The initial ratio examined was market price index

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3/ Mr. O'Donnell's barometer group consisted of Dayton Power & Light Co., Duquesne Light Co., Ohio Edison Company and Toledo Edison Co. (Trial Staff St. ARO-1, p. 6)

which is calculated by dividing the average of each year's high and low stock price by a base year's average high-low stock price and multiplying the result by a factor adjusting for stock splits. This data for PECO, the barometer group and Moody's 24 public utilities is summarized on page 2 of Schedule 3 of Trial Staff Ex. ARO-1 and plotted on page 1 of Schedule 3. The plot on Schedule 3 illustrates that PECO's and the barometer group's market price index generally has lagged behind the electric industry since 1974, producing expectations of low or negative dividend growth for PECO and the barometer group (Trial Staff St. ARO-1, p. 11-2).

Dividend yields for Moody's 24, PECO and the barometer group are summarized on page 2 of Schedule 4 of Trial Staff Ex. ARO-1 and plotted on page 1 of Schedule 4. Unlike the Moody's 24, the plot on page 1 of Schedule 4 demonstrates that dividend yields for PECO and the barometer group have remained high, indicating a higher risk associated with these utilities. (Trial Staff St. ARO-1, p. 12-3). The trend of the moving average compound growth rate of dividends for PECO, the barometer group and Moody's 24 are summarized on page 4 of Schedule 4 of Trial Staff Ex. ARO-1 and plotted on page 3. The plot on page 3 of Schedule 4 demonstrates that PECO and the barometer group have underperformed the industry average in dividend growth rate. This growth rate underperformance is consistent with the relatively higher experienced dividend yield. Mr. O'Donnell noted that PECO's yield at December 17, 1985 was 12.8% vs. 8.8% for

Moody's 24. The relatively higher yield is indicative of investor uncertainty relative to PECO's dividend growth prospects and an expectation of lower growth for PECO. (Trial Staff St. ARO-1, p. 13-4).

Finally, Mr. O'Donnell compared the dividend payout ratio for PECO, the barometer group and Moody's 24. This data for 1975-1984 is summarized on page 5 of Schedule 4 of Trial Staff Ex. ARO-1 and demonstrates that PECO and the barometer group has had a much higher payout ratio than the industry average, primarily because of their ongoing construction programs.

Mr. O'Donnell drew those conclusions from his examination of these key ratios for PECO. In the last ten years, the company has maintained a relatively high dividend yield in comparison to the electric utility industry, indeed PECO's current dividend yield is among the highest in the country. PECO's growth in dividends has been relatively lower than that of the industry. To maintain capital attraction, the company has had to pay out a higher percentage of its earnings in dividends. While it is expected that PECO will maintain its dividend through adjustments to the payout ratio, the company's high yield relates to very low expectations of dividend growth in the next few years. (Trial Staff St. ARO-1, p. 15).

3. Discounted Cash Flow

The first common equity return rate estimation methodology used by Mr. O'Donnell was the discounted cash

flow (DCF). This technique is based on the principle that expected cash flows is the basis for determination of value in the marketplace. The theory is that the present value of a stock is the discounted value of the future dividend stream and is expressed in a formula which states that the cost of capital is the sum of the dividend-yield (dividend divided by the price of the stock) and the rate of expected growth in dividends. (Trial Staff St. ARO-1, p. 16).

Mr. O'Donnell used an average of spot and 6 month dividend yields to calculate the DCF, using the shorter period yields to capture the downward trend of dividend yields described in pages 1 and 2 of Schedule 4 of Trial Staff Ex. ARO-1. Equal weight was given to the spot and historic yields, which are summarized on page 1 of Schedule 5 of Trial Staff Ex. ARO-1. Mr. O'Donnell's growth rate factors were taken from the Value Line Investment Survey, Solomon Brother's Electric Utility Monthly and Merrill Lynch's Quantitive Analysis (p. 2 of Schedule 5 of Trial Staff Ex. ARO-1). The estimates for the earnings growth rate for PECO ranged from -2.3% to 2%. For his DCF, Mr. O'Donnell used the 1% to 2% range of dividend growth rates (p. 2 of Schedule 5) which he considered optimistic relative to the yield used (Trial Staff St. ARO-1, p. 17).

In his direct testimony, Mr. O'Donnell's DCF calculation indicated a required rate of return on common equity for PECO of 14.7 to 15.7 percent, with the range of his barometer group being between 12.6 and 14.1 percent (Trial Staff St. ARO-1, p. 18; Trial Staff Ex. ARO-1,

Schedule 5). In his updated and surrebuttal testimony (Trial Staff St. ARO-2), Mr. O'Donnell recalculated his DCF using updated financial information (Schedules 1, 2, 5 of Trial Staff ARO-2B) and calculated a return on common equity for PECO of 13.7 to 14.7, with a range for his barometer group of 12.4 to 13.9 percent (Trial Staff St. ARO-2, p. 6).

4. Risk Spread Method

The second common equity return methodology used by Mr. O'Donnell was the risk spread method. The theory behind the method is that risk can be more accurately quantified by computing the spread that exists between a firm and other companies. That quantification can be approximated by comparing the yield to maturity of a company's seasoned first mortgage and to another company's bond with a similar coupon, maturity date and call feature. That spread is then added to the barometer group DCF results to arrive at the indicated rate of return on common equity. (Staff St. ARO-1, p. 18).

Mr. O'Donnell's initial risk spread analysis is contained in Schedule 6 of Staff Ex. ARO-1. The bond yields, spreads, and other pertinent information were taken from Moody's Bond Record (p. 4 of Schedule 6) and from Standard and Poor's Bond Guide (p. 3 of Schedule 6). Spreads based on the yield to maturity of both agencies were averaged. Current and six month average spreads were calculated and averaged (p. 2 of Schedule 6). Mr. O'Donnell used the average of the spot

and six month average to be consistent with the yield time periods in his DCF analysis (Trial Staff St. ARO-1, p. 19).

In his initial direct testimony, Mr. O'Donnell calculated risk spread method indicated rate of return in the range of 12.5 - 14.1%. (Trial Staff St. ARO-1, p. 18; p. 1 of Schedule 6 of Trial Staff Ex. ARO-1). In his updated and rebuttal testimony, witness O'Donnell calculated a risk spread in the range of 12.3 to 13.8%. (Trial Staff St. ARO-2, p. 6; page 1 of Schedule 6 of the Trial Staff Ex. ARO-2B).

5. Conclusion and Interest Coverage Ratios.

Mr. O'Donnell reviewed the results of his DCF analysis and risk spread methods on pages 19-21 of his direct testimony. (Trial Staff St. ARO-1, p. 19-21). There he concluded that the DCF result should be viewed as the more credible method than the risk spread. Witness O'Donnell then exercised his judgment on these results to recommend a rate of return on common equity for the Company in the range between 14-15%. In his updated and rebuttal testimony, Mr. O'Donnell recalculated his DCF and risk spread using updated financial information and recommended a rate of return on common equity in the lower half of his 14 to 15% range. (Trial Staff St. ARO-2, p. 6).

In order to test whether his common equity recommendation provided the Company with an opportunity to maintain its credit rating, Mr. O'Donnell calculated the Company's pre-tax opportunity interest rate coverage in Schedule 7 of

Trial Staff Ex. ARO-1. Mr. O'Donnell's common equity return recommendation resulted in a pre-tax opportunity rate coverage range of 3.0 - 3.1 times. This result compared favorably with PECO's historic five year and June 30, 1985 pre-tax coverages and should provide the Company an opportunity to maintain its credit and provide for capital attraction (Trial Staff St. ARO-1, p. 21-2).

D. PECO's Claim for a 15.75% Return on Common Equity Must be Rejected.

The Company's filing which initiated this proceeding seeks the opportunity to earn a 12.7% after-income tax overall rate of return including a 15.75% return on common equity. (PECO St. 3, p. 5). As evidence of the modest nature of its rate of return claim in the filing, the Company has sponsored the testimony of Joseph F. Brennan (PECO Sts. 28, 28A, 28B, 28C) who calculates higher return requirements for the Company. In his initial direct testimony, Mr. Brennan calculated an overall rate of return of 13.15% to 13.34%, including an opportunity to earn a return of 16.9 to 17.4% on common equity (PECO St. 28, p. 1). In his updated and rebuttal testimony, Mr. Brennan's recalculated recommendation was an after-income tax overall rate of return of 12.76%, including a recommended cost rate for common equity of not less than 15.9% (PECO St. 28B, p. 1). The Trial Staff submits that the Company's rate of return claim in its filing is overstated for the reasons developed in Staff witness O'Donnell's testimony. Mr. Brennan's

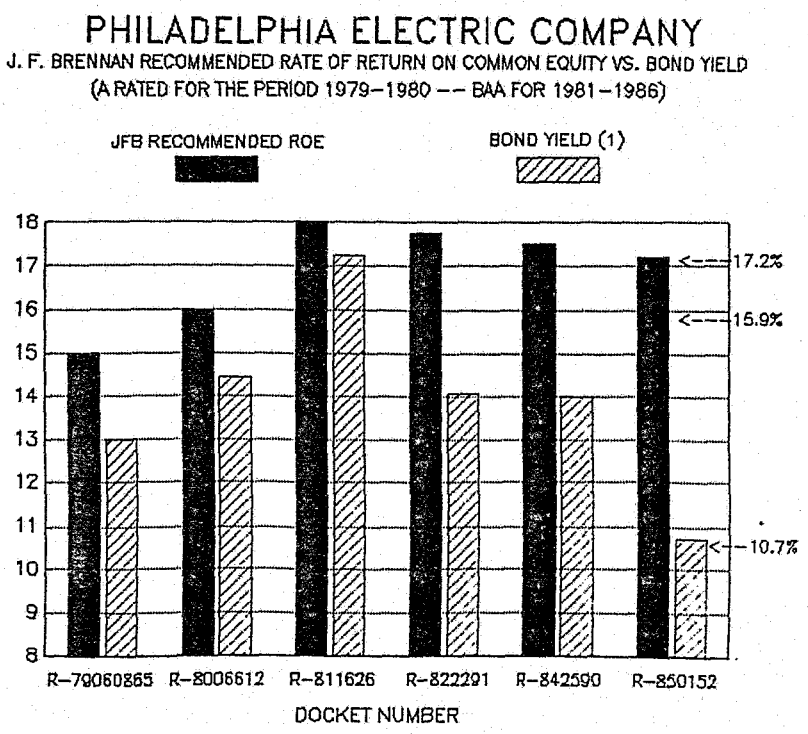
recommendations are excessive and demonstrate the over-statement characteristic of his testimony in other PECO rate cases.

Mr. Brennan developed his common equity return recommendation by using DCF and risk spread methodologies, giving equal weight to both. (PECO St. 28, p. 2). The results of witness Brennan's calculations, however, are common equity return recommendations greater than any other financial witness in the proceeding. The overstated nature of Mr. Brennan's recommendation can be seen by examining the effect of interest rates on the cost of common equity.

One of the most important indicators of the direction of common equity cost rates is that of long-term interest rates. Since 1981 the trend of long-term interest rates has been downward. This downward trend followed a long period of increasing long-term interest rates. (See discussion in Staff St. ARO-1, p. 2-3). During that period of increasing long-term interest rates, recommended and allowed rates of return on common equity rose in tandem (Trial Staff St. ARO-2, p. 1). When questioned on cross-examination about the effect of inflation on the cost of capital, Mr. Brennan agreed generally that a major factor affecting cost of capital during the 1970's and early 1980's was the high interest rates caused primarily by rising inflation and that his recommendations in prior PECO cases reflected the effect of inflation on the cost of capital. (Tr. p. 10). A review of Mr. Brennan's recommendations in the current and past PECO cases reveals, however, that

significantly reduced inflation and interest rates levels are not recognized in Mr. Brennan's common equity recommendations.

In his updated and surrebuttal testimony, Staff witness O'Donnell sponsored an exhibit which plotted Mr. Brennan's rate of return on common equity recommendations for PECO for the current and past five rate cases against the appropriately rated average bond yield for the six months prior to the Commission decision for the decided cases and to the spot February 5, 1986 BBB bond yield for the current case. (Page 1 of Schedule 1 of Trial Staff Ex. ARO-2A). Mr. O'Donnell chose the period of six months prior to the Commission decision because of his observation of a tendency on the part of both the Commission and Mr. Brennan to focus upon current bond yields, especially when interest rates were rising. The graph contained on page 1 of Schedule 1 of Trial Staff Ex. ARO-2A is reproduced below:



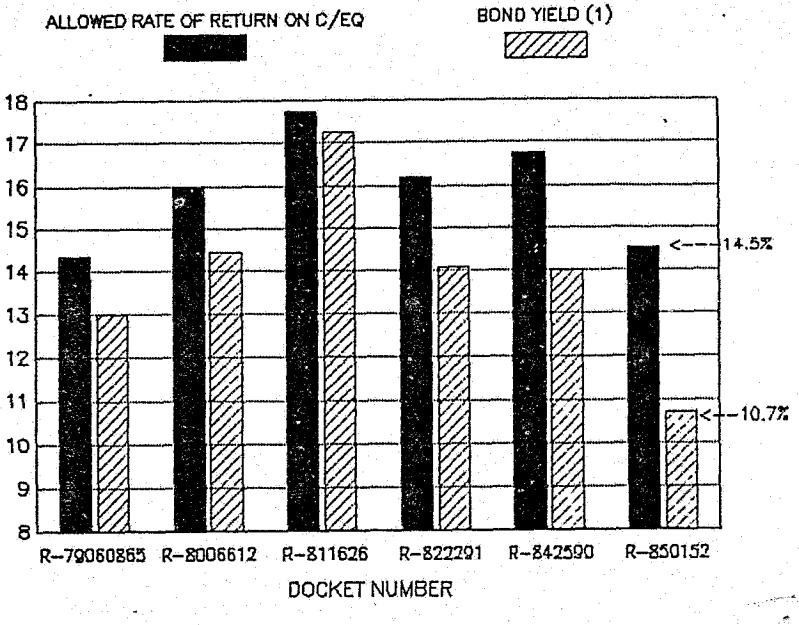
Note: (1) Six months prior to Commission Order for decided cases, spot at February 5, 1986 for current case.

Source: Schedule 1, Page 3 of Trial Staff Ex. ARO-2A.

The graph indicates that as long-term interest rates rose, so did Mr. Brennan's common equity return rate recommendations. In this period, the spread between Mr. Brennan's recommendation and the average long-term interest rate was compressed. From 1981 to the present, however, Mr. Brennan's recommendations did not decline significantly with the sharply declining trend of long-term interest rates. The spread between Mr. Brennan's original 17.2 percent mid-point common equity return rate recommendation and the current 10.7 BBB bond yield is almost 6.5%. The spread between Mr. Brennan's revised 15.9 percent recommended rate of return on common equity and the same 10.7 percent bond yield is 5.2 percent. Although Mr. Brennan's reduction narrows the gap, the spread is still wide. The result is an overstatement of the rate of return on common equity for PECO (Trial Staff St. ARO-2, p. 2).

Mr. O'Donnell sponsored a similar exhibit plotting Commission allowed rates of return on common equity against the same long-term interest rates used in the prior example. The graph contained on page 2 of Schedule 1 of Staff Ex. ARO-2A is reproduced below:

PHILADELPHIA ELECTRIC COMPANY
ALLOWED RATE OF RETURN ON COMMON EQUITY VS. BOND YIELD
(A RATED FOR THE PERIOD 1979–1980 -- BAA FOR 1981–1986)



Note: (1) Six months prior to Commission Order for decided cases, spot at February 5, 1986 for current case.

Source: Schedule 1, Page 3 of Trial Staff Ex. ARO-2A.

The graph indicates that the 14.5% mid-point of Mr. O'Donnell's original rate of return recommendation is reflective of the downward trend of long-term fixed capital cost rates. The 14.5% mid-point allows for a widening of the spread. The current 3.8% spread (14.5%-10.7%) is 2.16% greater than the 1.64% average spread between the Commission allowed rate of return on common equity and the long-term bond yield experienced over the past five rate cases. The 3.8% spread is approximately 1.5% greater than the 2.29% average spread between Mr. Brennan's recommendation and the

long-term bond yield over the same past five rate cases. The 14.5% midpoint of Mr. O'Donnell's original common equity return recommendation and the 14.25% midpoint of his updated recommendation both provide a greater spread than observed in the last five PECO rate cases and is therefore reasonable and fair.

The Trial Staff respectfully submits that Mr. O'Donnell's common equity return recommendation reflects current economic conditions and provides the Company a fair opportunity to meet its obligations and attract new capital. Mr. Brennan's recommendation is overstated and does not reflect current economic conditions. It must therefore be rejected.

E. Allowance for Selling and Issuance Costs.

PECO witness Brennan indicated in his direct testimony that the rate of return recommendation allowed should be adjusted in order to permit the company to recover the costs of selling and issuing new shares of stock. (PECO St. No. 28, pp. 21-2).

A constant in rate filings before the Commission is the request by utilities to have a fair rate of return set which will compensate them for the asserted effects of market pressure, dilution and issuance and selling costs associated with the sale of common equity. As regularly, the Commission has rejected all such claims.

The Commission repeatedly has held that these items are fully reflected in the market price of the stock

and thus has refused to adjust its rate of return determinations; the instant requested increases would provide an undeserved windfall to PECO if accepted by the Commission, since investors, presumably, are aware of this long-standing policy. In light of the fact that utilities, especially PECO with the need to finance its huge construction program, go to the capital market so regularly, this type of adjustment is unnecessary and inappropriate. As the Commission stated in P.U.C. v. Duquesne Light Co., R-821945, (entered January 28, 1983):

> It appears to us that the product of this technique [a Capital Earnings Pricing Technique] is a stated earnings rate which will enable common equity to sell at book value. Since we do not consider such a result the objective of our search, we do not perceive that the result of this analysis, [is] of any value to us here.

Order at p. 59.

While the Commission there recognized that selling costs do exist and are incurred, it remained convinced that such costs are reflected in the stock's price. This position was reaffirmed by the Commission in PECO's prior rate case at R-822291, 58 Pa. P.U.C. 7 (1983). The Commission there stated:

> Several parties to this proceeding propose that we adjust our rate of return to reflect market pressure, flotation costs, and dilution associated with the issuance of new common stock. We are not convinced that such an adjustment is necessary. Initially, we note that as PECO frequents the capital markets on a regular basis, it

> is logical to assume that the prices paid for new issuances already include such factors. Further, we have noticed that certain flotation costs are generally set forth in the prospectus of a company and are presumably included in any estimate of the revenues to be acquired through an issuance. Finally, we are not convinced that the investor and his securities dealer is so unsophisticated as to fail to account for these factors when ascertaining whether or not to purchase the stock of a utility. Accordingly, it is unnecessary to adjust our rate of return to reflect market pressure, flotation costs, and dilution as suggested.

58 Pa. P.U.C. at 31.

All of the arguments profferd to support this requested adjustment have been presented to the Commission before; the Commission has rejected them in every case. Staff respectfully submits that since PECO has not presented any new reason for the Commission to change its long-standing policy, an adjustment to the cost of capital should not be made.

IV. NON-LIMERICK NO. 1 REVENUE REQUIREMENTS

A. Rate Base

1. The Company's Coal Inventory Level Should Be Reduced To A 50-Day Inventory Allowance.

Trial Staff has proposed that PECO's Philadelphia area coal inventory level be reduced from a 60-day supply to a 50-day supply. The basis for the recommendation is the diminished percentage of generating capacity that Philadelphia area coal units represent on the PECO system. With Limerick No. 1 in service, Philadelphia area coal-fired generation will represent only about ten percent of the company's generating capacity. (Staff Stmt. TVP-1, p. 3). Staff witness Prowell has recommended a decrease in the number of inventory days supply of coal maintained at PECO's Philadelphia area coal units because the units now comprise a minor fraction of PECO's generating capacity and because the lower number of days is in line with levels maintained by other utilities in Pennsylvania for ratemaking purposes (Id., p. 3). Mr. Prowell's adjustment is based upon inventory needs in a normalized test year for a normal period of operation. This approach is consistent with standard rate-making principles.

On rebuttal, PECO maintained that it already recognized the decreased level of Philadelphia area coal fired units as a percentage of generating capacity by a reduction to the burn rate.

PECO's recognition of the reduced importance of these coal fired units through a reduction to the burn rate does not impact Staff's adjustment. The arguments constitute a diversion from the issue of the number of inventory days for which a coal supply should be maintained to an unrelated matter of the burn rate. This was made evident upon the cross-examination of PECO witness Carroll:

> Q. With respect to the amount of inventory days in your response to Mr. Prowell's testimony could you tell me: does the number of inventory days on hand determine the burn rate?
>
> A. No, the burn rate is a function of the operation of the unit, and the number of days of inventory on hand would determine the total inventory required, based on burn rates.
>
> Q. So the number of inventory days does not determine the burn rate; you are saying it has no application to that?
>
> A. Yes. It does not determine the burn rate at a particular time; it does though determine the length of time you would be examining the burn to determine a burn rate for inventory purposes.
>
> Q. Does the burn rate determine the number of inventory days specifically that would be in storage?
>
> A. The number of inventory days is a fixed item.

(Tr. 4044-4045; Hearing of 3-6-86).

It is apparent that the only relationship the number of inventory days has to the burn rate is that of a multiplier required to determine the total amount of inventory

to be kept on hand. As Mr. Carroll stated, the number of inventory days is a fixed item.

Staff's position is based upon a recognition that the reduced importance of the Philadelphia area coal fired units impacts inventory for the units in two separate and distinct ways. The first impact is in the burn rate of the units and the second is in the number of inventory days which a coal-supply should be maintained. PECO has accounted for the former but neglects the latter.

Rates are set on a normal level of operation on a test year basis. Mr. Prowell's adjustment recognizes the need for the maintenance of a normal level of inventory for normal operation of the units. Since the units are but a fraction of PECO's generating capacity, recognition must be given to the reduction of their normal requirements for operation. Mr. Prowell's adjustment of inventory days from 60 days to 50 days is appropriate for ratemaking purposes and his adjustment of $1,623,500 to PECO's rate base claim for coal inventory should be adopted.

2. Cash Working Capital

a. The Commission should continue its policy of removing uncollectible accounts expense from the cash working capital allowance.

Staff witness Hosler proposed an adjustment to eliminate uncollectible accounts from the company's revenue

lag used to determine the cash working capital requirement. As Mr. Hosler explained:

> Q. Why have you eliminated uncollectible accounts from the revenue lag days as in the Company's request?
>
> A. Uncollectible accounts do not create an additional need for funds by the company. All of the Company's operating expenses required to serve customers, including expenses to serve those customers which ultimately do not pay, are included in the composition of the Commission's approved rates....

(Trial Staff Stmt. DPH-1, p. 9).

The instant proceeding is not the first case in which PECO has attempted to reflect uncollectible accounts in its revenue lag determinations for cash working capital. In Pennsylvania Public Utility Commission v. Philadelphia Electric Company, 58 PUC 743 (1985) (R-842590), the company calculated its cash working capital to eliminate uncollectibles expense from the working capital expense base and to reflect the impact of uncollectible accounts expense on the Company's revenue lag. The company also made the same argument in the company's gas rate case at Docket No. R-832410 (1984).

In each instance the Commission considered and rejected this argument. The Commission reiterated its position that the uncollectible accounts expense is a non-cash expense and, as such, is inappropriate for inclusion in a cash working capital calculation. In its discussion of the revenue lag approach for inclusion of this expense, the Commission stated:

> "While we agree that this aspect and the resulting argument are, to a certain degree, novel, it does not alter our longstanding policy which recognizes that:
>
> (U)ncollectible accounts expense is not an out-of-pocket expense incurred to serve customers for the period until revenues from customers are received in payment of services. (cites omitted) We consider the uncollectible accounts expense to be a non-cash expense and, as such, no return allowance will be granted."

Pennsylvania Public Utility Commission v. Philadelphia Electric Company, 58 Pa. PUC 743, 783 (1985).

The uncollectible accounts expense simply is not a cash expense; its effect on the cash working capital claim is already fully considered in the revenue lag study. Collection expenses are already included in the expenses claimed by the company and recovered from ratepayers. PECO does not wait until accounts are written off to be reimbursed for these expenses. As Mr. Hosler stated:

> The Company's revenue level is set to cover the cost of uncollectible accounts, thus all revenue received actually includes some revenue for uncollectible accounts.

Trial Staff Stmt. DPH-1, p. 10.

In the instant proceeding PECO has advanced no reason why the Commission should depart from its well-considered practice. Therefore, Staff respectfully submits that the uncollectible accounts expense should be removed from the calculation of PECO's cash working capital requirement.

b. PECO's Cash Working Capital Claim Should Be Adjusted To Recognize Tax Payment Lag Days.

(1) Federal Taxes

The statutory payment schedule for payment of federal taxes for PECO requires that federal income taxes be prepaid at 90 percent of the actual tax liability for the tax year. Pursuant to this requirement four prepayments at 22.5 percent of the liability may be made during the tax year with the remaining ten percent to be paid by March 15 of the year.

PECO does not follow this tax payment schedule but has opted to increase the level of prepayments to three 25 percent payments with the fourth payment set at fifteen percent. (PECO Stmt. 23B, p. 4). PECO's concern about utilizing the statutory payment schedule instead of its own early prepayment method is based upon its interest in avoiding a penalty situation. (Id. p. 5). While the concern for potential penalties seems genuine, the reality is that PECO has not been even close to a penalty situation for years and,

in fact, has been able to forego some of the prepayments by its early prepayment schedule. (Id., p. 4-5).

Trial Staff witness, Dennis Hosler, has employed the statutory scheme for prepayment of federal income taxes and has recalculated PECO's lag for payment of taxes on this basis. (Trial Staff Stmt. DPH-1, p. 14). The basis for Staff's adjustment is the recognition of the need to balance the interests of ratepayers and stockholders. PECO's early payment schedule for federal income taxes creates a greater cash working capital requirement on the company than would be otherwise needed under the statutory schedule. This additional prepayment places a greater burden on PECO's ratepayers who provide a return on capital. This becomes an unreasonable burden when one considers that PECO has overestimated its projected tax liability to such an extent that entire prepayments are made unnecessary because the earlier prepayments were overstated. (PECO Exhibit I, Volume II, Item II-D-23b). On the surface, such a result appears reasonable; however, it is questionable whether early and excessive prepayments under PECO's payment schedule constitute good business practice. The real life effect is to drain away funds prior to the company's need to expend this cash. Thus, the effect on ratepayers is to require extra funds at an early stage and to compel a return on these funds which is not yet needed for tax purposes. It is evident that ratepayer interest is clearly not a concern on PECO's part.

The adjustment proposed by Staff reflects a balancing of interests. The Staff's position includes an adherence to the statutory schedule and a relief from the burden PECO's schedule places on ratepayers. Trial Staff's adjustment to the lag for federal income taxes should be adopted and an appropriate reduction to PECO's cash working capital claim should be made.

(2) Ad Valorum Taxes

Trial Staff witness, Dennis Hosler, has proposed an adjustment to PECO's cash working capital claim which would reflect the fact that the amount of the prepayment of these taxes are normally based upon actual prior year tax liabilities rather than projected tax liabilities for the current tax year as reflected in the methodology employed by PECO. Staff's adjustment is intended to reflect the timing differentials between the Company's before the fact (pre-payments) and after the fact (with tax return) tax payments amounts expected to occur in its actual tax payment pattern versus that reflected in Company's claim.

With regard to the Public Utility Realty Taxes (PURTA), the company is required to prepay 90 percent of this tax during the tax year with final payment due April 15 following the tax year. The prepayment can be based upon either 90 percent of the projected current year's tax liability or 90 percent of the prior year's tax liability which is a known. These payments can be distributed over the year in quarterly payments of 22.5% each.

The Company's lag day calculation does not reflect the fact that the prepayments are normally based on the prior year's tax liability. The application to the prior year is significant when it is recognized that historically the PURTA tax has shown growth in the amount of tax and prepayments of 22.5 percent are less than 22.5 percent of the actual tax year liability. The balance, being more than 10% of the tax liability, is paid along with the tax return by April 15th following the tax year.

The statute for Capital Stock Tax requires an 85 percent prepayment by April 15th of the tax year with the final payment due April 15 following the tax year. The prepayment amount may be based upon either 85 percent of the projected current year's tax liability or 85 percent of the year preceding the prior year's tax liability which is a known. Again, the Company's computation of the lag days for Capital Stock taxes reflects prepayment based on the future test year amounts and does not reflect the fact that the prepayments are based a prior years actual tax liability.

Staff's recommended CWC calculation represents PECO's experienced payment pattern. PECO's choice to make payments based upon a prior year's actual tax liability during a period of rising tax liability is economically beneficial and also avoids risk of underpayment penalties resulting from payments based on projected tax liabilities. Since the prior year's liability is known, the potential for error is much less.

Trial Staff's adjustment to Ad Valorum taxes is designed to more accurately reflect the estimate of the cash working capital effect of PURTA and the Capital Stock tax. Staff's adjustment does not reflect any modification to PECO's projected total tax liabilities. In each instance, Mr. Hosler has developed a growth rate to apply to the taxes to determine a more accurate estimate of the timing of the payments of PECO's projected future test year liabilities. Although PECO did not agree with the use of a growth rate in either situation, the company did propose an alternative growth rate for PURTA and the Capital Stock Tax. Mr. Hosler has accepted the adjustments to his growth rates and has recalculated his cash working capital adjustments accordingly. (Trial Staff Exhibit DPH-2, Schedule 1).

The purpose of Mr. Hosler's adjustment is to accurately reflect the timing of PECO's payment of its tax liabilities so that a proper cash working capital requirement can be determined. The methodology presented by Staff witness Hosler provides a better estimate of the amount of PECO's tax liabilities which will be prepaid with respect to Ad Valorum taxes and recognizes the timing differential between that reflected in the claim and the actual expected tax payment pattern. On this basis Mr. Hosler's adjustment should be adopted.

(3) Taxes Other Than Income

The principal components of this tax group is the Gross Receipts Tax (GRT) which comprises 87 percent of this category. According to the GRT statutory payment schedule, the company is required to prepay 90 percent of this tax on April 15. The prepayment can be based upon either 90 percent of the current tax projections or 90 percent of the prior year's tax liability which is a known. In the case of PECO, the company has been prepaying its GRT on the basis of the prior year's tax liability; however, the rate case claim reflects prepayment at the prior year's liability as adjusted for a full rate increase for the R-842590 rate case and the requested R-850152 rate increase (less ECR roll out effects).

Although PECO attempts to correctly reflect the 90 percent prepayment of the GRT based upon the prior year's tax liability, PECO has over-inflated the prior year's tax liability by including subsequent rate increases. (Trial Staff Stmt. DPH-1, p. 13). Mr. Hosler noted that the effect of PECO's action is to negate the growth in the GRT.

Mr. Hosler calculated the lag for GRT by developing a growth rate from PECO's data for the years ended June 1983 through June 1986 based upon actual unadjusted tax amounts. (Id.) The GRT growth rate was determined to be 7.85% which was then reflected in the lag computation. The result was 13.6 weighted average lead days in payment of taxes other than income. (Trial Staff Exhibit DPH-1, Schedule 4, p. 10).

PECO has argued that historic tax levels which included uncertain rate increases cannot be used to compute a growth rate for GRT. PECO witness, Richard Wright, asserts that "rate increases are far from certain in either level or timing" and that "(i)t is not appropriate to adjust costs for hypothetically increased levels of rates which may or may not occur."

While this may be correct to some extent, the four year data or three growth periods employed by Mr. Hosler serve to modify these effects. In addition, PECO has averaged a rate increase every fifteen months since May 1980 (including June 1986). There is, therefore, some historical basis with respect to timing of rate increases. It is Staff contention that to ignore the rate increases as suggested would result in a growth rate and cash work capital allowance much farther from the Company's actual future needs. Although growth rates are not guaranteed, the results proposed by Staff's calculations provide a much sounder basis for determining the lag for these taxes than that proposed by PECO.

3. PECO's Rate Base Claim Should Be Reduced to Reflect Prior Commission Findings of Imprudence at Salem Unit I

In the PECO rate case at R.I.D. #438 the Commission found imprudence on the part of PECO in the construction of the Salem Nuclear Generating Station No. 1. The Commission reduced PECO's rate base claim in that proceeding by $10.5 million to reflect its findings. The

Commission reaffirmed its finding and the reduction in the PECO rate proceedings at R-79060865 and R-80061225 and determined that its prior conclusions were res judicata. On appeal of R.I.D. 438 the Commonwealth Court affirmed the Commission conclusion that its decision was res judicata but reversed the Commission on the amount of the reduction. On remand the Commission in its Order reaffirmed the imprudence aspect of its decision and reduced its original rate base disallowance from $10.5 million to $5.9 million. In each case subsequent to the remand order the Commission has adjusted PECO's rate base claim to reflect the Commission's findings. Pa.P.U.C. v. Philadelphia Electric Company, R-822291 (1983) and Pa.P.U.C. v. Philadelphia Electric Company, R-842590 (1985).

In the instant proceeding, the Company has not made the appropriate rate base reduction to reflect the original findings. OCA witness Bleiweis has calculated the amount to be applied in the proceeding to be $4,380,000. (OCA Statement 4 and OCA Exhibit 26). Staff submits that, consistent with prior Commission decisions, PECO's rate base claim should be reduced to reflect the findings of imprudence in the construction of Salem Unit No. 1.

4. PECO's Rate Base Claim Should Be Reduced to Reflect Adjustments Based Upon Proper Accounting Practices.

Trial Staff witness, John P. Prego, CPA, presented testimony on three adjustments to PECO's rate base claim which were based upon a continuing property record audit report prepared by the Commission Audit Staff, dated October 18, 1985. (Trial Staff Statement JPP-1). These adjustments include Adjusting Entries No. 4, 9 and 13. (Trial Staff Exhibit JPP-1, pages 5, 7 and 8).[4/] Mr. Prego testified that the amounts reclassified pursuant to his adjustments represented costs that were improperly or erroneously capitalized according to accounting treatments prescribed by the Uniform System of Accounts or which represented costs inappropriately incurred and passed on to ratepayers. (Trial Staff Statement JPP-1, p. 3 and 11).

(a) Adjusting Entry 4

Adjusting Entry 4 represents additional costs incurred by PECO because a contracted vendor supplied the company with poor quality equipment and inadequate design documentation. The equipment was associated with the installation of the System Operation Computer and Data Transmission System (Trial Staff Exhibit JPP-1, p. 5). It

4/ Staff would note that a number of findings were made but that only entries 4, 9 and 13 are being contested.

was Mr. Prego's position that since the company did not evidence any attempt to question, contest or even consider legal action to recover these costs, the company failed to adequately protect its customer's interests and should be denied recovery of the cost of the equipment failures. (Trial Staff Statement JPP-1, p. 11, Tr. 2456-2457).

Adjusting Entry No. 4 would retire from plant in service the $801,000 capitalized by the company which was associated with the subject equipment. It should be noted that since these plant retirements are charged to the related accumulated provision for depreciation account, only the depreciation expense claimed is affected while the net plant in service is not changed.

Staff contends that Mr. Prego's adjustment accurately reflects the principle that ratepayers should not be compelled to underwrite all construction and operation errors. The control of contractors and the products they provide is clearly within the purview of management and when improper workmanship results in additional costs, the first line of recovery should not automatically be the ratepayer.

(b) Adjusting Entry No. 9

Adjusting Entry No. 9 represented reclassifications from plant in service accounts to various income, expense and deferred accounts totaling $15,596,177. (Trial Staff Statement JPP-1, p. 4). Of this amount, the company agreed with the reclassification of $261,747 but disagreed with the

reclassification of the remaining $15,334,430. (Trial Staff Statement JPP-1, p. 4).

As noted by Mr. Prego, these contested reclassifications represented costs incurred by the company that, according to the provisions of the Uniform System of Accounts, were improperly capitalized. (Trial Staff Statements JPP-1 and JPP-2). Mr. Prego maintained that these costs were for work done at the company's nuclear stations which involved minor items of property that were not significant enough to satisfy the resultant substantial addition criteria required to be classified as capital items.

PECO's witness, Warren H. Smith, responded to Mr. Prego's contention as follows:

> Q. Do you have any other comments on Mr. Prego's testimony.
>
> A. Yes. Mr. Prego is placing considerable emphasis on the fact that the physical work performed constituted the addition of a minor item of property. I agree that technically the addition in fact is part of a retirement unit and is a minor item of property.
>
> I feel it is important to examine why the Uniform System of Accounts adopted the retirement unit concept and should it be adopted literally in this instance.
>
> Electric Plant Instruction 10.A. requires the retirement unit concept to be used "For the purpose of avoiding undue refinement in accounting for additions to and retirements and replacements of electric plant,..." (emphasis added).
>
> For these two projects, I concluded refined accounting was necessary -- the criteria of a substantial addition was met and capitalization

of the costs was proper and provided the appropriate recovery of costs through annual depreciation accruals. (PECO Statement 25B, p. 5).

Staff maintains that there is no basis for an assertion that an accounting treatment, more refined than that normally required of and followed by the company was necessary or that the required criteria for capitalizing the costs of adding minor items of property, a resultant substantial addition, was met. This position and Mr. Smith's contention, that the measurement criteria used to support Mr. Prego's position of measuring the cost of the additions against the balance of the plant account to which they were charged, was clearly erroneous and is without merit.

The Uniform System of Accounts does not specifically address a method of measurement to ascertain when a substantial addition, in the context of the applicable Electric Plant Instruction, 10C(1), resulted. (Trial Staff Statement JPP-2, p. 3). Without specific provisions, other criteria must be considered when making this determination.

One of these other criteria may be found in the basic concept of generally accepted auditing standards concerning materiality. In this context, the basic premise of measuring the materiality of a transaction, account balance or event is the relationship of its cost to the overall financial picture of the entity as represented in its financial statements. In addition, current tax laws establish guidelines which must be met to qualify, as substantial, improvements to

property for application of accelerated depreciation methods. While not specifically related to utility property, such criteria cannot be completely ignored where an applicable prescribed method does not exist. In this context, substantial improvements are defined as those that add at least 25% to the basis of property, usually its costs, at the beginning of a specified time period during which the improvements are made.

If either of the above criteria were used as a measurement of the costs of Adjusting Entry 9 minor property additions, neither a material transaction nor a substantial improvement would have resulted. As such, and in agreement with Mr. Prego's position based on the measurement against the plant account balance to which charged, Mr. Smith's contention that a substantial addition resulted is unreasonable and self-serving.

Mr. Prego has recommended that no additional rate recovery on these items be permitted in this case or in subsequent cases. As Mr. Prego stated:

> Mr. Smith also contends that a current reclassification to bring the Company's accounting records into conformity with the uniform System of Accounts would require the approval of an expense amortization allowance to recover these costs because they were never included in any test year data on which the Company's rates were set. In my opinion, this position is contrary to the basic premise of ratemaking, which does not require a dollar for dollar matching of revenue collected and revenue requirements established and approved.

(Trial Staff Statement JPP-2, p. 8).

Mr. Prego's contention is that of the standard ratemaking principle which precludes retroactive ratemaking. The items contained in Adjusting Entry 9 were items PECO should have claimed as an expense instead of a capital item. It would be a violation of standard ratemaking concepts to go back and expense the items and seek recover of them through rates. Rates are set on a normalized prospective basis. PECO provides no basis for deviating from this standard.

(c) Adjusting Entry 13

Adjusting Entry 13 is a reclassification of costs incurred by PECO for surveying and designing an aerial section of a 13KV distribution line between Philadelphia Electric's Callowhill and Delaware Substations. (Trial Staff Statement JPP-1, p. 11). Staff witness Prego has proposed that the costs associated with the survey and design of the line be reclassified from construction work in progress to expense. As Mr. Prego testified, the project was originally started in 1976 but was delayed for five years due to lower than expected load growth. In the interim, community opposition arose and the line was eventually constructed underground. (Trial Staff Statement JPP-1, p. 11). Subsequent to completion of the audit report, PECO transferred the subject funds from the CWIP account (107) to the plant in service account. This does not alter Staff's position that the item should have been expensed and that future rate recovery of the expense

is unwarranted and inappropriate. As Mr. Prego stated with respect to all of his adjustments:

> [W]e believe that our reclassifications to the various income, expense and deferred accounts represent the proper accounting that should have been made at the time the transactions were originally classified as plant in service. The Company's effective rates at that time, therefore, included our reclassifications to the various income, expense and deferred accounts. As such, we do not believe that these reclassifications should impact any future rates established for Philadelphia Electric Company.

(Trial Staff Statement JPP-1, p. 12).

Staff submits that Adjusting Entry 13 is reasonable and should be adopted in this proceeding.

B. REVENUES

1. An adjustment to PECO's Operating Revenues Should Be Made Which Recognizes PECO's Excessive Forced Outage Rate.

PECO is a member of the Pennsylvania - New Jersey - Maryland Interchange (PJM) and as such is required to maintain a PJM determined reserve capacity margin. The reserve margin established by the PJM for PECO is 25.66% which consists of 22% for the standard PJM requirement, 0.45% for a load drop adjustment and 3.21% for a forced outage adjustment. The forced outage adjustment is based upon excessive forced outages as compared to the PJM average. (Trial Staff Statement MJG-1, p. 2).

Trial Staff witness, Michael Gruber, has proposed that an adjustment be made to PECO's operating revenues in recognition of the forced outage rate which is above the PJM average. Mr. Gruber explained his adjustment as follows:

> PJM has determined that for PECO to meet its reserve requirement to the power pool, which in turn is acting to ensure that PECO and the other member companies are able to meet any deviations in load or emergency situations, it must have an installed reserve of 25.66% for the 1986-87 planning period. As PECO is required by PJM contract to have installed a 25.66% reserve I do not think that an adjustment to overall plant levels is appropriate. Since 3.21% of this generating plant is due to a high forced outage rate, PECO's management should not be allowed to profit from its own inability to operate its plants as effectively as other utilities.
>
> PECO stockholders who are responsible for PECO's management, not ratepayers should be penalized for the requirement that the Company maintain a higher than otherwise necessary reserve margin.

(Trial Staff Statement MJG-1, p. 3).

In recognition of the responsibility of management for the higher than average forced outage rate and its attendant requirement for additional generating facilities, Mr. Gruber has recommended the disallowance of the common equity return associated with 3.21% of PECO installed generating plant. (Trial Staff Statement MJG-1, p. 2). Staff submits that the subject adjustment places the responsibility for the excessive forced outage rates on the group that is best able to compel improved performance. The control of the operation of the

plant is farthest removed from the ratepayers who have little, if any, input into decisions on and by management.

With regard PECO's arguments aver prudence or imprudence, Staff submits that a pattern of higher than average forced outage rates clearly raises a question concerning management's ability to operate the system. Staff's adjustment only applies to the percentage of outages above the PJM average, it does not require PECO to maintain a 0% forced outage rate. It should be noted that there are PJM companies who are capable of maintaining below average forced outage rates, eg. Pennsylvania Power & Light Company has a - 4.32% forced outage rate which translates into a lower PJM required reserve capacity margin (21.54%). (Trial Staff Exhibit MJG-1, Schedule 2, Attachment pp. 1 and 2). Staff would point out that the only PJM company with a greater forced outage rate is GPU. (Trial Staff Exhibit MJG-1, Schedule 2, Attachment p. 1). GPU's problems are well documented and require no discussion here.

With regard to the question of imprudence, PECO's statements on this issue are selective in that they discuss only portions of the Commission's prior findings. Mr. Rush testified in part:

> Q. Does this 3.21% reserve requirement for 1986 impact PECO's long-term planning objectives?
>
> A. No... In the longterm PECO can expect its forced outage rates to be lower since the 3.21% requirement for 1986 was based on a period in which several

extraordinary outages occurred that have previously been ruled by the Commission to be prudent.

* * *

Q. Have these outages been previously reviewed by the Commission?

A. Yes, in case ECR #8, P-830453, et al, the commission ruled that all but two days of the Eddystone 1 outage (March 6, 1983-December 31, 1983) and all of the Peach Bottom 2 outage (July 4, 1983-December 3, 1983) were prudent.

(emphasis added)

(PECO Statement 14A, pp. 12-13).

Conspicious by its absence was any mention of the Salem 1 outages which the Commission found to be imprudent. This information was elicited on cross-examination. (TR-4340).

Staff's adjustment is based upon the fact that PECO's forced outages are at a higher rate than those of the other PJM companies (except for GPU). Staff maintains that PECO should not be allowed to benefit from having more forced outages than its peers and the company's operating revenues should be adjusted by $19,324,000 to recognize this situation.

C. EXPENSES

1. PECO's Inflation Factors Are Overstated.

In developing expense levels for the 1985 and 1986 company budgets, PECO used a general inflation factor where specific known cost changes were not available and the level of activity being budgeted was expected to remain essentially unchanged, except for inflation. The calculated inflation factors were 5.25% for 1985 and 6.4% for 1986. (PECO Stmt. No. 19, p. 4). Trial Staff submits that these inflation factors are overstated and that therefore the company's adjustment for inflation in its claim must be reduced.

A description of PECO's inflation factor was provided by PECO's chief accounting witness, Thomas P. Hill, Jr. Mr. Hill stated:

> It is important to note that the Company's corporate inflation factor is based on two elements, as shown in Mr. Solecki's direct testimony. Specifically, the Company's corporate inflation factor is a weighted average of estimates for the GNP implicit price deflator and wage rates, specifically those applicable to PECO labor. The Company's inflation rate is an arithmetic average of these two estimates.

(PECO Stmt. 18C, p. 5).

Mr. Hill's description of PECO's inflation factor clearly demonstrates the unreasonable nature of its development of the inflation factor and the criticism of Staff's application of an inflation factor to specific accounts. PECO's inclusion of PECO wage rates in its inflation factor

is yet another attempt to get the Commission to accept a "PECO-specific" inflation factor - an invitation specifically rejected by the Commission in prior rate cases. Pa. P.U.C. v. Philadelphia Electric Company, R-842590 (1985) and R-822291 (1983). Moreover, the use of the company's cost of living wage increases as evidence of generalized wage inflation in the area is self-serving and fatally suspect. It must be remembered that these wage increases are not required by collective bargaining but are simply unilaterally decided on by the company.

With regard to PECO's criticism of Staff's application of an inflation factor to certain accounts, Staff maintains that PECO's contentions are without merit and inconsistent with its own position. The company maintains that included in certain accounts are labor costs which were specifically covered by PECO's declared wage rate increase of 5.4 percent. (PECO Stmt. 18C, p. 5). The critical aspect of PECO's contention is its insistent separation of the labor component. PECO seems to state that an inflation factor would be applied only to unknown costs which would exclude labor costs since the wage rate was known. (Tr. 4044). The problem with PECO's arguments rest with its own inclusion of a labor rate into its inflation factor determination. Although PECO would have Staff separate labor costs from materials, PECO would apply a labor weighted inflation rate to these same accounts. PECO's position is clearly incongruous.

Staff witness, Charles T. Weakley, testified that a 3.28% inflation factor, based upon the GNP Implicit Price Deflator, should be used instead of those developed by the company. (Staff Stmt. CTW-1, p. 3). Mr. Weakley proposed a downward adjustment of $6,982,000, calculated by reducing the inflation factors used in the various operating accounts from 5.8% (average of 5.25% and 6.4%) to the 3.28% proposed in his testimony. (Staff Exhibit CTW-1, Schedule 8). The Staff submits that this adjustment is reasonable and should be adopted by the Administrative Law Judge.

The Commission has repeatedly accepted the use of inflation factors based upon the GNP Implicit Price Deflator. In the company's most recent electric rate case at R-842590, order entered January 25, 1985, the Commission rejected the use of a company derived inflation factor in favor of an inflation factor based on the GNP Implicit Price Deflator. (Order at p. 73). The Commission also accepted Staff's use of the GNP in Pa. P.U.C. v. Philadelphia Electric Company, R-822291, order entered November 23, 1983 and Pa. P.U.C. v. Philadelphia Electric Company (Gas Division), R-832410, order entered April 27, 1984.

The 3.28% inflation factor recommended by Staff witness Weakley is reasonable, based on current economic conditions and is consistent with established Commission precedent. It is therefore submitted that the company's claim for expenses should be reduced by $6,782,000.

2. The Costs Associated With The Replacement of the Transition Tubes at Eddystone No. 1 Should Be Amortized Over Ten Years.

PECO has included in its test year expense claims one half of the cost of the replacement of the transition tubes at Eddystone No. 1. (PECO Stmt. 22B). The total cost of the project is $3,400,000 and has a life span of 22.9 years which is the remaining life of the boiler. (Staff Stmt. CTW-1, p. 4).

Trial Staff witness Weakley has proposed that the cost of the project be amortized over a ten year period instead of the two years proposed by PECO. Staff's increased amortization period recognizes the extensive life span of the transition tubes and shares these costs among ratepayers over a greater period of time. Staff's proposal to amortize this improvement over a ten year period recognizes the benefits to subsequent customers and provides a reasonable period of time to recover such expenses. Trial Staff's adjustment will reduce the company's claim by $1,360,000 and should be adopted. (Staff Exhibit CTW-1, Schedule 9).

3. The Company's Test Year Wage Expense Claim Is Overstated.

PECO is entitled to recover only those expenses which are just and reasonable and which are adequately supported by the record in this proceeding. The Staff has presented testimony in this proceeding that the number of employees which the company claims it will employ by the end of the

future test year is overstated by 331. The Staff submits that the company's wage expense claim must be reduced by an equivalent amount.

Staff witness Weakley testified concerning the number of employees claimed by PECO (Staff Statement CTW-1, p. 1-2). Noting that the company has budgeted 11,286 employees for the future test year, Mr. Weakley compared the number of actual and budgeted employees during the first five months of the future test year and determined that the average monthly difference between the number of budgeted and actual employees was 354. (Trial Staff Exhibit CTW-1, Schedule No. 6). Mr. Weakley then analyzed the company's experiences for the years 1983-1985 and determined that the average annual percentage of employees under budget was 3%. (Staff Statement CTW-1, p. 2). Mr. Weakley has proposed that the expenses associated with 331 positions, which is 3% of the average number of employees budgeted for the future test year, be disallowed.

In calculating the amount of wage expense that should be disallowed, Mr. Weakley used a weighted average of starting salaries for the company of $18,624 (Trial Staff Exhibit CTW-1, Schedule No. 3) and associated benefits at 26.2% (Trial Staff Exhibit CTW-1, Schedule No. 4). The total wage expense disallowance was determined to be $4,590,000. The Staff submits that this is a reasonable adjustment and should be adopted by the presiding officer.

The burden of proof to support its wage expense claim is clearly on the company. Mr. Weakley's analysis of PECO's actual versus budgeted number of employees for the first five months of the future test year indicates that the number of budgeted employees was significantly in excess of the number actually employed by the company. Moreover Mr. Weakley's analysis of prior years provides a historical basis on which the company's claim could be examined.

Although in rebuttal testimony the company claimed that its actual wage expense for the test year was close to its budgeted figure (PECO Statement 18C, p. 3), the company did not challenge Mr. Weakley's calculation of employee numbers in the test year. Staff submits that Mr. Weakley's wage expense adjustment is adequately supported in the record and that the company's wage expense claim for the test year should be reduced by $4,590,000.

With respect to PECO's comparison of the total dollars in the budget and the actual payroll dollars spent, Staff contends that this is not a valid comparison. Budget payroll dollars do not include the wage increase declared by PECO since the budget is adjusted by PECO for rate case purposes to allow for the annualization of the wage increase. Thus the comparison between the budgeted dollars and the actual payroll dollars is not made on an equal basis. The Commission in Pa. P.U.C. v. Pennsylvania Electric Company, R-842771 (1985) addressed this concern. The Commission

agreed with the Administrative Law Judge who addressed this issue in the recommended decision. The Judge stated in pertinent part:

> Further, as Staff contends since rates here are based in part on normalized annual expenses, the proper comparison of payroll O&M expenses for past periods should be between normalized annualized claims and actual expense.

(R.D., at pp. 69-70). The Administrative Law Judge adopted Staff's adjustment in that proceeding and the Commission agreed with the Judge. The Commission in its order stated:

> We agree with the rationale of the ALJ and shall adopt it as our own. Notwithstanding the asssertions made by the Respondent in its exceptions concerning variances between budgeted and actual payroll spending, the company has not refuted nor attempted to explain its historical experience which evinces a pattern of budgeted expectations not being achieved. Accordingly, we shall adopt Staff's proposed methodology which is based upon a comparison of Penelec's actual number of employees versus its budgeted payroll level through the first eight months of the future test year.

(Order, at p. 36).

Staff maintains that the Commission's decision is directly applicable to the instant proceeding and that the arguments therein address the criticisms raised by PECO. Trial Staff's adjustment should be adopted in this proceeding.

4. PECO's EEI Membership Dues Should Be Reduced.

The Edison Electric Institute (EEI) is a voluntary trade association of investor-owned electric utilities to which PECO belongs. Member utilities pay annual dues. In the case of PECO, the company has budgeted a total of $348,000 for EEI membership dues. (Trial Staff Statement KIL-1, p. 2).

Staff witness Keith Laudenslager has proposed that PECO's claim be reduced by $87,000 (Trial Staff Statement KIL-1, p. 2). Staff's proposal is based upon a subcommittee preliminary report of the National Association of Regulatory Utility Commissions of October 12, 1983 (Trial Staff Statement KIL-1, p. 2). As Mr. Laudenslager testified, the report asserts that EEI engages in many activities of benefit to ratepayers, but that it also engages in political and lobbying activities. The report suggests a disallowance of 25% to 33% of the dues for ratemaking purposes.

PECO's witness, Thomas P. Hill, testified on rebuttal that EEI estimates its expenses associated with lobbying to be only 2%. (PECO Statement 18C, p. 14). Mr. Hill suggests the disallowance in this case should be limited to but $12,500.

Staff witness Laudenslager responded to PECO assertion that only 2% of EEI activities were associated with lobbying. As Mr. Laudenslager noted, the percentages

as stated by Mr. Hill and supplied by EEI represent a narrow definition of the lobbying activities and does not include the costs associated with legislative advocacy. (Trial Staff Statement KIL-2, p. 2). Mr. Laudenslager specifically referred to an article in which an EEI spokesperson stated that under a more expanded definition of lobbying, "about 20 percent of the dues it collects could be attributed to lobbying and 'legislative advocacy.'" (Trial Staff Statement KIL-2 and Trial Staff Exhibit KIL-2A, Schedule 1). This is clearly a far cry from PECO's espoused 2%.

This proceeding is not the first case in which the issue of EEI Membership Dues and the NARUC report was raised. In Pa. P.U.C. v. Duquesne Light Company, R-842583 (January 24, 1985) the OCA proposed the same adjustment. In that case the Commission adopted the adjustment and disallowed 25% of the membership dues. The issue was addressed subsequently in Pa. P.U.C. v. Metropolitan Edison Company, R-842770 (October 24, 1985) and Pa. P.U.C. v. Pennsylvania Electric Company, R-842771 (October 24, 1985). In both cases the Commission adopted the Staff's proposed 25% reduction to EEI Membership Dues. In all three instances the utility argued that the NARUC report was only a preliminary report and that the credibility of the position in the report was not established. The Commission dismissed this argument in Duquesne:

> We believe that the record establishes that a substantial portion of EEI's activities are of no benefit to ratepayers. While the Company states that NARUC has not adopted the report of the subcommittee, nevertheless, the committee's findings, together with admission of Mr. Bauer that about 20% of the Institute's activities are related to "legislative advocacy," indicates that the recommendation of the Consumer Advocate is reasonable and should be adopted.

(Order at p. 99). The Commission reaffirmed its decision in Duquesne case in Met-Ed and Penelec.

5. PECO's EEI Media Advertising Expense Should Be Disallowed.

For the future test year, PECO has budgeted $272,000 for the EEI media program (Trial Staff Exhibit KIL-1B, Schedule 1).

With respect to PECO's claim, Staff witness Laudenslager has recommended a total disallowance of the claim. The basis of Mr. Laudenslager's recommendation is PECO's failure to produce evidence that these costs directly benefit its customers. Additionally, he noted that the NARUC subcommittee preliminary report has recommended a disallowance of all EEI media communication costs (Trial Staff Statement KIL-1, p. 3).

Trial Staff's recommended adjustment is supported by numerous Commission decisions including the most recent PECO rate proceeding at R-842590. The Commission in its prior decision referred to a number of recent proceedings upholding the same adjustment. Since then the Commission

has approved the disallowance of EEI Media Advertising in Pa. P.U.C. v. Duquesne Light Company, R-842583 (1985), Pa. P.U.C. v. Metropolitan Edison Company, R-842770 (1985) and Pa. P.U.C. v. Pennsylvania Electric Company, R-842771 (1985).

Trial Staff submits that PECO has presented no reason to the Commission which warrants a deviation from past Commission practices. PECO's claim for EEI Media Advertising should be disallowed and its claim should be reduced by $272,000.

6. PECO's Claim for Customer Accounts Expense Is Excessive.

Customer accounts expense is comprised of five accounts, series 901 through 905. Included in the series of Accounts is Account 904, Uncollectible Accounts. Trial Staff witness, Keith I. Laudenslager, performed an analysis of PECO's customer accounts 901, 902, 903 and 905. (Trial Staff Statement KIL-1). Mr. Laudenslager excluded Account 904 from his analysis because 904 represents a charge against a balance sheet account, based upon past experience ratios, which could be arbitrary in that it would be based on differing Company policies. (Trial Staff Statement KIL-1, p. 3).

For purposes of his analysis Mr. Laudenslager examined the aggregate level of customer accounting expense on a per customer basis for the twelve month period ending December 31, 1984 for five metropolitan areas. These areas included the cities of Chicago, Baltimore, Detroit, Boston and New York City. The information examined was derived from the Federal Energy Regulatory Commission (FERC) Form 1. (Trial Staff Statement KIL-1, p. 4). As Mr. Laudenslager noted, the cities selected for his comparison share similar characteristics in that they are situated in the northern section of the country and have a large urban population.

In Mr. Laudenslager's original testimony at Exhibit KIL-1, Schedule 2 the 1984 customer accounts expense for each company was inflated to June 1986 levels by using the GNP Implicit Price Deflation and an average cost per

customer for the five areas was derived. The average cost was $31.76 which was then applied to PECO's projected average number of customers of 1,343,513. Pursuant to these calculations it was determined that, based upon the average cost per customer for the five metropolitan areas, PECO's 1986 customer accounts expense should have been $42,670,000. (Trial Staff Statement KIL-1, p. 4 and Trial Staff Exhibit KIL-1, Schedule 2, p. 1). As Mr. Laudenslager noted:

> Q. How does this level compare to the Company claim?
> A. The Company has claimed a related expense level of $64,266,000 which represents an increased cost in excess of 13% over 1985 levels. The difference between my calculation of a reasonable expense level and the Company's claim in this rate case is $21,596,000 ($64,266,000-$42,670,000).

(Trial Staff Statement KIL-1, p. 4).

PECO's witness Thomas P. Hill, Jr. presented a number of criticisms to Mr. Laudenslager's recommended adjustment. (PECO Statement 18C, pp. 14-24). Mr. Hill questioned the similarity of data contained in FERC Form for all of the companies and indicated that comparisons could not be made on the basis of that data.

Staff would disagree with Mr. Hill attempt to stress dissimilarities in the FERC Form 1 data. Mr. Laudenslager addressed this issue on cross-examination:

> Q. Did you examine whether, for the other accounts, 901, 902, 903 and 905, whether there were any significant accounting differences

among the utilities for costs recorded to those accounts?

A. Well, basically because they were FERC accounts and it is the Uniform System of Accounts, I would assume that all the major utilities would report on a like manner.

So. I would not really feel that based upon - it's my understanding that all figures should be comparable based upon the FERC accounts.

(Tr. 2466-2467).

The Uniform System of Accounts has been adopted by FERC and submissions for FERC Form 1 are based upon it. Although some discrepancies may exist on a company to company basis, it is clearly unlikely that such discrepancies would be major in nature. Staff's use of the data in FERC Form 1 is reasonable in that it marks as closely as possible all information from the various utilities.

Mr. Hill also addressed a criticism to the economic conditions experienced by the different metropolitan areas which may influence a comparison as well as potential termination limitations imposed upon a utility in a particular area.

These issues were addressed by Mr. Laudenslager on cross-examination and in his surrebuttal testimony. With regard to termination practices, Mr. Laudenslager testified:

Q. My question is, are the winter moratorium requirements the same for all of these companies?

A. All but New York, primarily.

Q. Exactly the same as Pennsylvania requirements?

A. Verbatim, no, but they do all have some type of winter moratorium, with the exception of New York, and New

York, it's a statute of law, it is my understanding, that they are not allowed to, and then it becomes more an area where, by statute of law, they are not allowed to disconnect, and somehow it is taken over through a welfare agency or some other type of billings as far as a winter moratorium went.

(Tr. 2469-2470).

Although there may be different approaches to winter terminations, it was apparent from Mr. Laudenslager's review that this was an area of concern in all five of the metropolitan areas.

Mr. Hill has also questioned Staff's comparison of PECO with other Pennsylvania utilities. Perhaps it should be pointed out here that Mr. Laudenslager did perform an analysis which compared PECO to other Pennsylvania utilities. The fact is, however, that Mr. Laudenslager's adjustment was not based upon this analysis. If it had been, the adjustment to PECO's claim would have been $29,737,000 instead of $21.6 million. Mr. Hill's criticism of Mr. Laudenslager's comparison with respect to the divergence in economic conditions between Pennsylvania utilities is irrelevant. The Staff adjustment went only to the similarly situated and comparable metropolitan area. As Mr. Laudenslager noted on surrebuttal:

Q. Would you care to comment regarding Mr. Hill's discussion of PECO's service territory?
A. Mr. Hill compares the level of poor customers encompassed by PECO's service territory in relation to other Pennsylvania utilities as "unique"

to other Pennsylvania utilities. My comparison for adjustment purposes is between PECO and other major metropolitan areas who experience the same problems. The fact that PECO has a high proportion of Public Assistance Recipients based upon total in the State is irrelevant. What is relevant and what Mr. Hill did not point out is that the total percentage of poor based upon PECO's Service Territory is comparable to other major cities used in my study.

Q. Did you make any comparisons of PECO's service territory population mix with that of the other utilities mentioned in your testimony?

A. Yes, a comparison was conducted based upon the population mix of children and elderly and also the Social Security Recipients and AFDC Recipients as a percentage of the population. It was found that the percentages of PECO's population mix was not substantially different from the other Metropolitan Areas listed, so in fact, PECO is not "unique". See Schedule 2 of Trial Staff Exhibit No. KIL-2A.

(Trial Staff Statement KIL-2, pp. 3-4).

The arguments raised by PECO with regard to economic conditions unique to PECO's service territory and the impact of Chapter 56 are unfounded. Mr. Laudenslager's analysis included a review of these matters and found their impact to be minimal or non-existent.

An additional argument raised by Mr. Hill is whether utilities count the number of customers differently. As in the case of data filed pursuant to the Uniform System of Accounts, it is a resonable assumption that the FERC statistical filing requirements would be uniform for all utilities. In any event,

PECO has not presented any significant differences between the comparison group of cities.

PECO also criticizes Mr. Laudenslager's analysis for a purported failure to recognize differences in meter reading practices among the five cities. As Staff's witness pointed out on cross-examination and in his surrebuttal testimony, he did recognize some divergence with respect to one area of Con-Edison of New York (Bronx) which read meters bimonthly and some bimonthly meter reading by Boston Edison. As Mr. Laudenslager stated, it was his opinion that in each case the effect of the difference would be minor. (Tr. 4073).

A final criticism raised by PECO questioned Staff's use of the GNP Implicit Price Deflator in taking the December 1984 dollars to June 1986 for the five cities. Mr. Hill in his rebuttal testimony argued that the average change in total expense from 1983 to 1984 for the five companies was 9.62% while the GNP for 1984 as compared to 1983 changed by only 3.8% (PECO Statement 18C, pp. 23-24). Mr. Hill maintains that the GNP fails to measure the appropriate level of increase for these five areas.

Mr. Laudenslager, in his surrebuttal testimony, for comparison purposes adjusted his calculations based upon the application of a 9.6% increase instead of the GNP Implicit Price Deflator of 3.8%. (Trial Staff Exhibit KIL-2, Schedule 3). The use of PECO's inflation factor resulted in a $17,633,000 reduction to the company's claim instead of the proposed

$21,596,000. (Trial STaff Statement KIL-2, p. 5). Staff has reduced its adjustment to recognize the $17.6 million reduction.

Trial Staff's analysis of PECO's claim provides a reasonable basis for an adjustment to PECO's customer accounts expense. Staff's use of a barometer group which is composed of companies operating in the northern tier of the country and servicing a large urban population provides an excellent comparison of expenses. Although differences may exist between the areas compared and PECO, these differences are minimal in comparison to the shared characteristics. In each case the companies experience some level of winter moratoriums and, for the most, part read meters in a monthly basis. As Mr. Laudenslager noted, the economic conditions experienced by PECO's service territory are not unique to it.

Staff submits that PECO has not demonstrated the reasonableness of its claim. The excessively high cost on a per customer basis as compared to the average for Chicago, Detroit, Baltimore, Boston and New York has not been justified. As such, Staff contends that PECO's claim should be reduced by $17,633,000.

7. Pursuant to the Commission Order At C-78080459, PECO's Claim For Certain Expenses Relating to Nuclear Information, Education And Advertising Must Be Disallowed.

On February 18, 1986 the Commission entered an Order in the complaint proceeding at Docket No. C-78080459. In its Order the Commission specifically enumerated those items which, as a result of its investigation, it determined were not properly charged to the ratepayers. The company was directed to supply the actual amounts of each expense which was included in the company's test year claim. Pursuant to the Commission's Order PECO submitted testimony from Mr. Hill which itemized the costs involved.

It is Staff's position that the expenses listed in the Commission's order are not properly recoverable from ratepayers and that these items, in accordance with the order, should be disallowed. PECO's claim should be reduced by $5,931,000. (PECO Stmt. 18A).

8. PECO's Decommissioning Claim Is Overstated.

(a) The Amortization Period for the Decommissioning Reserves Should Match the Service Life of the Units.

PECO's decommissioning claim anticipates that the decommissioning funds for the Peach Bottom Units 1 and 2 and the Salem Units 1 and 2 will be fully paid by the year 2008

which is the expiration date for the NRC licenses on these plants. (Tr. 2407). It should be noted, however, that the service lives on these units go beyond the stated expiration dates. (Trial Staff Statement MJM-1, p. 4).

Trial Staff witness, Martin J. Mayer, has proposed that the accrual of funds be extended to the service life of the plants instead of the license expiration date. (Trial Staff Statement MJM-1, p. 4). As Mr. Mayer points out, the license expiration date will be subject to possible extension at the company's request. (Tr. 2407). As Mr. Mayer stated:

> Q. Can the company operate these units without an NRC license?
>
> A. No, they cannot. However, they could request the NRC to extend the license, and it is the stated policy of Philadelphia Electric that they will do so. If you refer to the testimony filed in the previous case, the Limerick investigation, the company stated that it was their intention to extend the life of those units in fact beyond the years I have stated.

PECO's response to Mr. Mayer's testimony was to reference a proposed rulemaking by the NRC which require fund to accrue until the end of the licensing period. (PECO Statement 20A, p. 1).

The above referenced proposed rulemaking was addressed by Mr. Mayer:

> These proposed regulations, which were initially published in February of 1985, are intended to serve as a stimulus in an effort to generate input from sources outside the N.R.C. They are clearly not final. According to Mr. Keith G. Steyer

> of the office of Nuclear Regulatory Research of the N.R.C. the earliest that any regulations are expected to be approved by the N.R.C. is October of 1987. It should be noted, that included in these proposed regulations is a suggested time period of 2 years in which the licensee must submit funding information. Given the fact that these regulations are merely proposed in nature, and that existing licensees will have until October of 1989 (at the earliest expected date) the foundation for Mr. Wright's comments is speculative.

(Trial Staff Statement MJM-2, p. 2).

Staff submits that given PECO's intention to seek an extension of its NRC licenses on Peach Bottom 2 and 3 and Salem Units 1 and 2 (Tr. 4342), it is reasonable to extend the period for the accrual of decommissioning funds until the end of the service life of the respective plants. Staff's adjustment to the decommissioning expense claim of $1,037,000[5/] should be adopted. (Trial Staff Exhibit MJM-1A, Schedule No. 3).

(b) PECO's Reserve Deficiency In Its Decommissioning Fund Should Be Amortized Over the Remaining Life of the Units.

PECO has included in its decommissioning expense claim, the collection of a reserve deficiency in its fund and has sought to amortize this deficiency over a five year

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5/ Based on Company's Revised Claim in TPH-2, Item B-15 as found at PECO Statement No. 20B.

period, (PECO Statement 20, p. 24). The basis for the five year amortizaiton was set forth by PECO's witness, Richard Wright, as follows:

> The development of the Company's first site specific decommissioning cost study has indicated that decommissioning costs are substantially higher than we estimated through the comparative analysis techniques utilized as the basis for previous claims. As a result, the magnitude of the prior accrual correction in this proceeding is unusually large.

(PECO Statement 20A, p. 3).

Trial Staff witness Mayer has proposed that the reserve deficiency be amortized over the life of the plant in order to avoid burdening only current ratepayers with this expense. As Mr. Mayer stated:

> My method is fair to all ratepayers, both current and future. The Reserve Deficiency has developed as the result of a re-evaluation of decommissioning fund needs, as well as inadequate earnings of the fund historically to keep pace with the cost increases determined by that re-evaluation, and as such, is not the liability of any particular group of ratepayers. To charge only current ratepayers for this expense is simply unfair.

(Trial Staff Statment MJM-1, p. 5).

Staff submits that the amortization of the reserve deficiency over the life of the units does not adversely effect PECO. The funds are escrowed for future use in decommissioning the company's nuclear units and are not intended to cover PECO's day to day operating expenses.

With respect to the collection of funds from current versus future ratepayers, Staff would note that PECO has not demonstrated that current ratepayers are responsible for the deficiency. The only thing PECO has established is that the current ratepayers are closer in time to the discovery of the deficiency. This simply does not provide an adequate basis for assigning these costs strictly to current ratepayers.

Staff's adjustment balances the interests of current and future ratepayers and should be adopted. PECO's claim should be rendered by $1,896,000.[6/]

(c) PECO's Decommissioning Fund Expense Claim For Peach Bottom Unit 1 Should Be Rejected.

The origins of Peach Bottom Unit No. 1 was set forth in the testimony of PECO witness, Wright, as follows:

> Peach Bottom Unit No. 1 was built through the efforts of a consortium including PECO and 52 other companies, collectively called High Temperature Reactor Development Associates, Inc. (HTRDA). Each member of HTRDA contributed funds toward the design and construction of Peach Bottom Unit No. 1. The objective of the participating companies was to obtain technical knowledge, information, experience and training in the design, construction, maintenance and operation of a nuclear power plant.

(PECO Statement 20A, p. 8).

6/ Based on Company's Revised claim in TPH-2, Item D-15, found at Statement No. 20B.

Peach Bottom Unit No. 1 was in operation from 1967 to 1974. (Trial Staff Statement MJM-1, p. 8). In 1974 the unit was retired and was placed in a safe storage condition. Final decommissioning will be completed at the same time as the decommissioning of Peach Bottom Units 2 and 3 and PECO is proposing that a decommissioning fund for Unit 1 be accrued over the remaining life of Units 2 and 3.

Staff has several concerns with PECO's claim for the decommissioning. The initial concern is the substantial period of time between the retirement of Unit No. 1 in 1974 and PECO's commencement of a decommissioning fund accrual in 1986. Peach Bottom Unit No. 1 has not provided service for twelve years and has not been a used and useful plant for current ratepayers. The delay on PECO's part in seeking a decommissioning fund for this unit has resulted in an unreasonable burden on current ratepayers and is inconsistent with its own position on collection of the reserve deficiency. In that instance PECO rejects the accrual of funds for the deficiency over the remaining life of the subjects plants; however, with Peach Bottom Unit No. 1 PECO is willing to encumber current and future ratepayers with an even greater burden for a plant which has not been a benefit to any ratepayer for at least twelve years. At least in the case of the reserve deficiency ratepayers are now and will continue for some time to receive some benefit from the operation of the units. The same can clearly not be stated for Peach Bottom Unit No. 1.

PECO's argument that the unit was at one time a benefit to ratepayers and that the costs of decommissioning should be borne by current and future ratepayers rings shallow when one considers the limited period of operation (1967 to 1974) of the unit. The Peach Bottom Unit No. 1 was built by the consortium of companies who benefitted substantially from the information, knowledge, experience and training provided by the unit. PECO's ratepayers should not be required to bear the sole burden for the decommissioning of the unit where so many benefitted. PECO's lack of foresight with regard to anticipating the retirement and disposal of this unique plant should not been allowed to encumber current and future ratepayers who are not receiving and will not receive any benefit from the unit.

Staff submits that PECO's claim for the decommissioning expense associated with Peach Bottom Unit No. 1 should be eliminated and its test year expense claim should be reduced by $691,000.

9. PECO's Claim For Amortization Of Damaged Nuclear Fuel Assemblies At Salem Unit No. 1 Should Be Reduced

PECO has requested that it be allowed to recover the cost of damaged nuclear fuel assemblies at Salem Unit No. 1 by amortizing the cost of the assemblies, plus interest, over a three year period (PECO Exhibit JPH-2, D-M and Tr. 439). The total claim of $929,000 includes $617,495 for the assemblies and $311,500 in interest.

Initially, PECO had recovered the cost of the damaged fuel assemblies in its Energy Cost Rate (ECR). However, the Commission's 1982 fuel audit discovered this fact and in response to the Audit Report, PECO agreed to refund the cost of the assemblies plus interest to ratepayers. (Trial Staff Statement DPH-1, p. 7). PECO now seeks recovery of the cost of the damaged assemblies through base rates and has included in its claim the interest paid to ratepayers.

Staff submits that PECO's attempt to recover the interest on the assemblies which was paid to ratepayers because of PECO's inappropriate inclusion of the costs in the ECR is illogical and ludicrous. The interest applied to the refunded cost of the damaged assemblies was clearly designed to make ratepayers whole for the inappropriate collection and use of ratepayer funds.

Staff witness Hosler has proposed that the Commission disallow the recovery of interest and that only the actual cost of the assemblies be recovered. Mr. Hosler recommended thatthe $617,495 cost be amortized over the three years proposed by PECO. (Trial Staff Statement DPH-1, p. 7).

Staff contends that the interest refunded to ratepayers was intended to reflect the time value of money and to discourage the inappropriate collection of the costs through the ECR and that PECO's request, if approved, would nullify the effects of the original refund. Staff's proposed adjustment should be adopted and PECO's rate case claim for the test year should be reduced to $206,000.

10. The Administrative Law Judge Should At A Minimum Reduce PECO's Claim For The Salem Management Evaluation Program By $3,484,000.

Trial Staff witness Hosler has proposed an adjustment to PECO's claim for the Salem Management Evaluation Program costs at PECO Exhibit TPH-2, D-10d. (Trial Staff Statement DPH-1, pp. 5-7). Mr. Hosler has recommended that PECO's test year claim for this expense be reduced by $3,484,000. As Mr. Hosler testified, his adjustment reflects a three year amortization of PECO's share of the $1,111,627 paid to Management Analysis Company, the consulting firm hired by Public Service Electric and Gas Company (PSE&G) to develop an action plan for the management of the Salem nuclear facility. (Trial Staff Statement DPH-1, p. 5).

The impetus for the management review at Salem came from the NRC and was stated by PECO's witness John J. Carroll:

> Q. What is the purpose of the adjustment shown on page D-10d of TPH-2?
>
> A. At the time of the Salem No. 1 breaker incident, Public Service Electric and Gas Company (PSE&G) was questioned by the Nuclear Regulatory Commission on the Company's ability to operate and manage a nuclear facility. When PSE&G addressed this question, it took advantage of the timing to perform a complete management review of their procedures and policies with regard to nuclear power operation. . . . (emphasis added)

(PECO Statement No. 22, p. 18)

Staff would contend that this statement alone is sufficient to raise a question of whether any costs of the management study should be borne by ratepayers. The fact that matters had been allowed to reach such a state that the NRC questioned the competence of the Salem management raises serious concerns with respect to prudency on management's part. Staff would argue that this reference to the need for such a study speaks against requiring ratepayer payment for the costs of the study.

Although the support for a total disallowance of the costs exists, Staff has not proposed a total disallowance but instead has recommended that only those costs attributable to the outside consultant be recovered. The basis for Staff's recommendation rests principally with PECO's failure to meet its burden of proof on the issue of the reasonableness and justness of the costs of those portions of the study not attributable to MAC.

PECO's response to Mr. Hosler's recommendation was set forth in Mr. Carroll's rebuttal testimony:

> Q. Mr. Hosler has proposed a $3,484,000 reduction in the amount of annual amortization allowed for the Salem Station Management Evaluation Program. Would you please comment on his adjustment?
>
> A. On page 6 of Staff Statement DPH-1, Mr. Hosler states that:
>
> a) PECO only supplied that portion of the cost for the Management Evaluation Program incurred to purchase MAC's services.

b) The remaining costs have not been specifically identified.

c) The exact nature of the expenditures are unknown, i.e., are they capital items, expense items, or monthly operating and maintenance expenses?

I will address these items separately as follows:

1) PECO supplied the information requested in the interrogatory questions.

2) At no time was PECO requested to supply a detailed breakdown of the charges which constituted PECO's claim of $7,283,000. However, in cross-examination, this witness did state that the expenses were incurred for the consultant, PSE&G employees are not on the Salem Station payroll, outside technical people and others active in developing the action plan.

(PECO Statement No. 22B, p. 19-20).

Staff would strongly disagree with Mr. Carroll's statements. Based upon a reading of the TPH-2 exhibit which did not identify MAC costs or any internal costs of PSE&G and based upon Mr. Carroll's pre-filed direct testimony which spoke of the retention of MAC, an impression was given that all of these costs were attributable solely to MAC. Staff's initial interrogatory did address the total of $7.3 million and indicated that all of the $7.3 million was attributable to MAC.

Mr. Carroll's above quoted response seems to state that since specific questions on the $7.3 million were not asked, then PECO had no obligation to provide any specific

information on this claim. It was only in rebuttal testimony to Mr. Hosler that any information was provided and even that information represented a very general breakdown of the dollars.

It should be noted that the total cost of this study was $17 million and that PECO's portion of the costs were $7.3 million of the $17 million. The total cost for MAC's review was $1,111,627 and PECO's responsibility was for $473,442 of this amount. (Trial Staff Statement DPH-1, p. 6). A $17 million study is clearly a substantial cost for a management review and Staff would contend that the sheer magnitude of the cost mandates some explanation and substantiation. PECO was clearly alerted to the controversy and challenge to this claim and, pursuant to Section 315 of the Public Utility Code, was under an affirmative duty to demonstrate the reasonableness of its claim.

PECO's response to inquiries concerning costs other than MAC's participation came on cross-examination by the OCA:

> Q. Has Philadelphia Electric ever hired a company such as Management Analysis Corporation for the sum of $7 million to $15 million to do a management review of the Peach Bottom stations?
>
> A. No. We did not. The $15 million was not the price that was paid to Management Analysis Corporation; that was the cost of the consultant, the PSE&G employees that are not on the Salem station payroll, and everybody else who was active in developing the action plan.

> Management Analysis Corporation was really the consultant on it, and most of the work was done by other parties, some of them being contracted technical people from the various different industries who supply them; some of them were the Engineering Department of PSE&G from their Neward Headquarters, and that type of thing. . . .

(Tr. 369-370). Staff would argue that the above response does not constitute a breakdown of expenses or substantiation of the costs. With respect to Mr. Carroll's statements on rebuttal concerning these costs, again, mere mention of $6.5 million attributable to various and sundry groups or organizations does not provide justification of the costs. (PECO Statement No. 22B, p. 21).

Staff submits that the need for PSE&G, the Salem plant operator, to perform the study was based upon a lack of confidence in their ability to operate the Salem plant and that, under the circumstances, it was essential that the costs incurred for that study be justified. The retention of MAC is only one part of the controversy on this issue but it symbolizes the problems attendant to PSE&G's operation of the unit. When questioned why MAC was retained, Mr. Carroll stated:

> Q. Did the NRC require the company to hire an outside consultant to review the company's procedures and policies and develop an action plan?
>
> A. The NRC told the company that they were concerned with it and they wanted it addressed by

the company, and did not require but strongly recommended that a consultant firm would probably be the best one to do this thing.

Q. Who made this specific recommendation for the NRC or this strong recommendation that you get an outside consultant?

A. It was a meeting with the executives of Public Service and members of the NCR staff, but I can't tell you who it was.

Q. According to you, they specifically recommended or suggested that you get an outside consultant to do this?

A. It is my understanding that they strongly recommended that if an outside consultant was picked they would view that favorably. I don't think there was anything that said: you must get an outside consultant. I think the words were: if you get one we will view that favorably.

(Tr. 373-374).

If one accepts the idea that the study was necessary or a result of prudent action, the above could, to a limited extent, justify the retention of MAC. It does not, however, justify the remaining substantial costs of the study. These costs were never specifically identified or substantiated. The mere statement that $6.5 million of the $7.3 million cost to PECO involved the purchase of various clerical and technical services hardly justifies or establishes the reasonableness of the charges.

Trial Staff submits that PECO has failed miserably to meet its burden of proof on this issue and questions whether sufficient documentation ever existed as to tthe actual costs of the study. The image conjured up by PECO's half-hearted presentation is that of PECO simply receiving a very large bill and then paying it with no questions asked. Whether or not this is true cannot be determined from this record. As such Staff has recommended that the only costs PECO should be permitted to recover are those associated with its share of MAC participation or $473,442. Staff proposed that this cost be amortized over three years.

Staff maintains that PECO has clearly failed to meet its statutory burden of proof and that all costs of the Salem Management Evaluation Program not associated with MAC should be disallowed.

11. PECO's Claim For Operation And Maintenance Expenses For Power Plant Outages Are Overstated.

Trial Staff witness, Dennis Hosler, has proposed an adjustment to PECO's claim for O&M expenses for power plant outages. (Trial Staff Statement DPH-1, pp. 1-5). Mr. Hosler's adjustment is based upon a review of the Company's experienced and budgeted expense levels and their comparison with the Company's claim in this case.

PECO's claim was not based upon an actual review of experience but was determined by looking at the amount of outage expense allowed for nuclear and fossil units by the Commission in the last rate case and adjusting that allowance to reflect intervening inflation. The problem with PECO's method is apparent when one recognizes that an allowance in a prior case does not represent an actual experience. It was incumbent upon PECO to demonstrate that the allowance was achieved; otherwise, the allowance in this proceeding would merely be basing one fiction upon another fiction. If PECO's experience fell below its predictions then any subsequent calculations which were based upon the earlier prediction would be suspect. A normalized expense without any basis in reality clearly lacks credibility.

Staff approach can be broken into three categories. The first was the approach to the Peach Bottom and Salem Nuclear

Stations; the second was the approach to the Limerick Unit No. 1; and the third addressed PECO's fossil units. With regard to the Peach Bottom and Salem Units, there was a level of historic experiences which could be examined; however, since Limerick has no history on which a projection could be made, it required separate consideration. The fossil units required separate consideration from the nuclear units merely because of their operations. Nuclear units require refueling outages on a periodic basis and their histories would differ.

Mr. Hosler addressed the Peach Bottom and Salem Units by reviewing their last three historic years plus the company's budgeted amounts of expenses for the next three years. (Trial Staff Statement DPH-1, p. 3). Mr. Hosler summarized his calculation as follows:

> In order to calculate a normal level of expenditure for these stations the most appropriate period for review would be the last three historic years plus the Company's budgeted amounts for the next three years. Since the Company's Budget & Forecast beyond the rate case's fiscal year is done only on a calendar year basis, my calculations on Exhibit DPH-1, Schedule 1, pages 2 and 3 encompass 3 1/2 years budgeted information instead of three years. In addition, the adjustment of the historic data for inflation to the end of the future test year results in a more representative amount to be used for rate case normalization. I have not adjusted the Company's budgeted amount or removed abnormal expenses from the historic period.

Staff's calculation of a normalized expense for the Peach Bottom and Salem Nuclear Units is clearly based upon a

realistic assessment of their operations including the recognition of the 18 month refueling cycles on which all PECO's nuclear plant operate. Mr. Hosler recognized, in addition, the abnormal three year period from July 1982 through June 1985 for outages by not limiting his evaluation to that time period. Staff submits that Mr. Hosler's adjustment is a reasonable one and is based upon actual experiences. His analysis of the historic and budget levels was extensive and his adjustment reflected that fact.

With regard to the issue of Limerick Unit No. 1's O&M expense levels, Mr. Hosler recognized that Limerick had no history of its own to be examined for purposes of projecting future O&M levels. Mr. Hosler computed the normalized amount of the expense by taking the Company's budget amounts for the first two refueling outages and divided them by three years. (Trial Staff Statement DPH-1, p. 4; Trial Staff Exhibit DPH-1, Schedule 1, p. 4).

PECO's claim for Limerick outage expense was derived by computing the outage expense based upon Peach Bottom's experience and then inflating it. (PECO Statement 22E, p. 5). PECO's witness, Mr. Carroll, stated that forecasted values for Limerick should not be used because they were "made by station personnel who have never experienced an outage at their new plant." Staff contends, however, that these people have the same information available to them as did Mr. Carroll in addition to a more intimate working relationship with the Limerick station. It is a reasonable assumption that these

individuals should have as accurate or a more accurate estimate of projected expenses than Mr. Carroll. As such, the projections of the Company should form the basis of its rate-making claim and Mr. Hosler's adjustment should be adopted.

Staff witness Hosler also reviewed PECO's outage expense claim for fossil units. Mr. Hosler examined the company's five year historical expense level and found that the year ended June 1981 was much lower than the other years. Mr. Hosler adjusted the five years historical data by removing the high and low years (June 1981 and June 1983). An allowance for inflation was made to the historical levels and the remaining three years were averaged. (Trial Staff Exhibit DPH-1, Schedule 1, p. 5). The reasonableness of Mr. Hosler's approach becomes evident when one considers that PECO's criticism addressed his use of only a three year data and that on surrebuttal Mr. Hosler employed, for demonstration proposes, a five and a six year average which resulted in an even quarter adjustment than originally recommended. (Staff Statement DPH-2, p. 2.

It is critical that the Commission and the ALJ recognize that Staff is not adjusting the allowances for outage expense from the prior case. Staff's position is based upon a review of historical data and its comparison with the Company's proposed normalized level over the past five years. PECO has <u>not</u> in the past five years reached its proposed normalized level of outage expense. As Mr. Hosler stated:

> If you include the Company's future test year budgeted amount (from PECO Exhibit DPH-2, page D-106) of $18,700,000 there are 6 consecutive years the Company has not, or does not expect to reach its proposed normalized level. The company's method of computing the normalized level of outage expenditure at $22,728,000 resulted in an amount not remotely resembling normal level of expenditures.

(Trial Staff Statement DPH-1, p. 5).

Staff contends that Mr. Hosler's adjustment to PECO's fossil unit outage expense is based upon a realistic examination of historic experiences and provides a more accurate estimate of test year expenses than those presented by PECO.

PECO's outage expense claim is based upon the allowance from the prior rate case without any demonstration that the level in that case was achieved or achievable. Where historical projections have not matched the historical reality then they do not constitute a reasonable basis for a claim. Rate claims should not be treated as a wish list for the utility but should be required to be based upon realistic expectations as supported by historical experiences.

Staff's total adjustment to PECO's outage expense would reduce their claim by $5,494,000.

12. PECO's Rate Case Expenses Should Be Capped And Any Costs Allowed Should Be Amortized.

PECO's costs for the current rate case are in excess of $4,000,000 for consultants and $1,000,000 for legal fees. (Staff Exhibit RED-23 and TR-4066). In addition, PECO has claimed $5.5 million for its rate case expense in the Limerick II investigation at I-840381 (PECO Exhibit TPH-2, D-12a).

Although Staff recognizes that the dollars involved for PECO are substantial, there is a point at which these expenses are per se unreasonable. Section 315 of the Public Utility Code does place the burden of proof on the utility. It is, however, the quality of the evidence submitted - not its volume - which is necessary to satisfy that burden. The retention of countless experts, paid to support PECO's claim, who have had little relationship to the construction of and future operation of Limerick No. 1, represented an overkill of the greatest magnitude. The costs incurred in this case by PECO clearly evidence an operation that has gone out of control.

Staff's recommendation was presented by Staff witness, L.B. Jones. Mr. Jones proposed that, with respect to outside consultants, the company should be required to amortize those costs over five years. Mr. Jones' adjustment only applied to the current rate case claim. (Trial Staff Statement LJ-1, p. 2). It should be noted that PECO has

agreed to Mr. Jones' amortization schedule. In addition PECO has limited its claim to that amount contained in Mr. Hill's Rebuttal testimony (PECO Statement 18C, Schedule 3) for Technical and Management Consultants ($3,099,000) and has limited its claim for legal fees to the original claim of $800,000. (TR-4066).

While Staff recognizes that PECO's self-imposed cap represents an element of restraint, the fact remains that the actual costs, both claimed and unclaimed in the rate case, clearly raise an issue of PECO's management practices with respect to the retention of consultants. This goes to the number of consultants and their participation in the case. Indeed, pursuant to Staff's Motion In Limine and Subsequent Motion to Strike portions of witnesses testimony, PECO was clearly unable to provide any breakdown of the costs associated with the witnesses. (TR-4062-4063).

Staff, therefore recommends that PECO's claim be allowed as revised by Mr. Hill on rebuttal, but that a special audit by the Commission Audit Staff be performed on PECO's rate case expenses and that the company practices in the case be reviewed. In the alternative Staff would recommend that the Commission direct that special attention be given to this area in PECO's next management audit.

D. TAXES

The Trial Staff's adjustments to the Company's tax expense claim in this proceeding were sponsored by Staff witness Jeffrey M. Heverling[7/] in his direct and surrebuttal testimonies (Trial Staff Sts JMH-1, JMH-2) and the accompanying exhibit to his direct testimony (Trial Staff Ex. JMH-1). The Trial Staff submits that these adjustments are consistent with State and Federal law and Judicial and Commission precedent and should be adopted by the Presiding Officer.

The initial adjustment proposed by Trial Staff witness Heverling concerned the Company's proposal to collect Federal and State deferred taxes on capitalized overheads on amounts of pensions, taxes and employee benefits which have been capitalized for ratemaking. Mr. Heverling proposed that the deferred taxes on capitalized overhead be flowed through to ratepayers, thereby reducing the Provision for Deferred Income Taxes (Trial Staff St. JMH-1, p. 3-6; Trial Staff Ex. JMH-1, Schedules 1, 2, 3).

The second adjustment proposed by Trial Staff witness Heverling concerned the reversal of previously accumulated deferred state income taxes. The Company had been permitted to collect deferred State income taxes in rates until its last rate case when the Commission directed

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7/ Fixed Utility Financial Analyst, Tax Section, Bureau of Rates, Pennsylvania Public Utility Commission.

it to implement a flow-through of the tax benefits. See Pennsylvania Public Utility Commission v. Philadelphia Electric Company, 58 Pa. P.U.C. 743, 811-2 (R-842580, 1985). Mr. Heverling recommended that the balance of State deferred income taxes which have accumulated at June 30, 1985 relative to liberalized depreciation (with the exception of the portion of State deferred income taxes already being amortized to ratepayers over three years as ordered at R-842580) should be amortized to ratepayers. Relying on the Commission's recent decision in Pennsylvania Public Utility Commission v. Bell Telephone Company of Pennsylvania, Dkt. No. R-842779 (1985), Mr. Heverling proposed a five year amortization of the previously deferred taxes. (Trial Staff St. JMH-1, p. 6-8, Trial Staff Ex. JMH-1, Schedules 4 and 5).

1. Summary of Trial Staff's Tax Adjustments

PHILADELPHIA ELECTRIC COMPANY
SUMMARY OF TAX ADJUSTMENTS AND RESULTANT
EFFECT UPON REVENUE REQUIREMENT

Description of Adjustment	Increase (Decrease) to Rate Base ($1,000)	Increase (Decrease) to Cost of Service (1,000)
Deny annual claim for deferred taxes relating to capitalized pensions & taxes at 6/30/86 (Staff Exhibit JMH-1, Schedule 2)	$ 6,012	($ 6,012)
Deny annual claim for deferred taxes relating to capitalized employee benefits at 6/30/86. (Staff Exhibit JMH-1, Schedule 2)	$ 3,566	($ 3,566)
Provide first year of the five year amortization for deferred taxes accumulated as of 6/30/85 relative to capitalized pensions, taxes employee benefits. (Staff Exhibit JMH- 1, Schedule!	$ 6,630	($ 6,630)
Provide first year of the five year amortization for State deferred taxes relative to liberalized depreciation, and accumulated as of 6/30/85. (Staff Exhibit JMH-1, Schedule 5)	$ 7,832	($ 7,832)
Provide adjustment to increase Federal deferred taxes, premised upon five-year amortization of State deferred income taxes. (Staff Exhibit JMH-1, Schedule 5)	($ 3,603)	$ 3,603
Total Increase (Decrease) to Rate Base and Cost of Service.	$20,437	($20,437)
Weighted Cost of Capital. (Staff Exhibit ARO-1, Schedule 1)	x 12.03%	
After-tax Revenue Requirements	$ 2,459	($20,437)
Before-tax Revenue Factor	÷ 50.23%	÷ 50.23%
Before-tax Revenue Requirement Attributable to Rate Base and Cost of Service.	$ 4,894	($40,686)
Combined Before-tax Revenue Requirement		($35,792)

Source: Trial Staff St. JMH-1.

2. Normalization of Capitalized Overheads

The Company is claiming deferred income taxes relative to capitalized overheads totaling $9,578,000 comprised of the following categories.

	($1,000)		
	Total	Federal	State
Capitalized Pensions & Taxes	6,012	4,938	1,074
Capitalized Employees Benefits	3,566	2,929	637
	9,578	7,867	1,711

Its claim is a continuation of normalization for capitalized overheads which was approved by this Commission in Pennsylvania Public Utility Commission v. Philadelphia Electric Company, Docket No. R-80061225, 55 Pa.P.U.C. 78 (1981).

Premised upon this Commission's prior Order (R-80061225), the Company capitalizes for ratemaking, certain overhead type costs related to pension expense, taxes and various employee benefits related to its capital projects. In contrast, these same costs are deducted by the Company on its current income tax returns. As a result, the Company calculates and proposes to collect deferred income taxes in an attempt to normalize (or delay) the flow of the immediate tax deduction benefit to ratepayers. The Company offers only time-worn arguments in support of its claim, which are easily refuted.

First, it is argued that the tax benefits generated by capitalized overheads are relative to plant which is not yet in service. As such, the Company claims:

> Current ratepayers do not pay a return on investment or depreciation expenses on property not in service, and therefore, should not be entitled to the tax benefits arising from these expenses.

(PECO Statement No. 23A, page 2).

Because the overheads are expensed and not capitalized for tax return purposes, there is no logical reason to associate the expenditures with assets in CWIP or rate base, but rather with the tax deduction taken on the return. In this regard, the Company fails to acknowledge the true effect of collecting deferred income taxes from ratepayers. Specifically, ratepayers are captive investors when deferred taxes are collected. Furthermore, they do not earn a proper return on their investment because the revenue dollars provided are only partially offset against rate base due to resultant increased federal and state income tax burdens under normalization. (The additional income tax burden is not a rate base deduction where the deferred tax burden is).

Secondly, the Company insists that a switch to flow through for tax benefits of capitalized overheads results in cross-subsidization. The Company offers this analysis in an attempt to utilize the "proper matching" argument which has been unsuccessfully placed before this Commission by many utilities in times past. Such argument

has been dismissed as being reasonable but of so little weight that it is almost totally unpersuasive.

Staff's position relative to this issue is that while ratemaking accounting may consider "proper matching", there is nothing which binds this Commission to strictly adhere to such concepts. However the Staff is "matching" expenditures to tax deductions and to revenues in the period in which the expenditures were made. In the final analysis, this Commission must also consider decisions of the Courts when it sets rates. Thus, this Commission is guided by the Pennsylvania Supreme Court's Opinion in Barasch v. Pennsylvania Public Utility Commission, 507 Pa. 496, 491 A.2d 94 (1985), which provides the clear rationale for whether or not current and deferred income taxes are appropriate for inclusion in rates. The Court assessed the issue as follows:

> Normalization has no effect on the amount due for our state income taxes. The extent by which the Commission adjusts a public utility's tax expense by removing the current tax benefits of accelerated depreciation in determining cost of service has no effect on the state taxes a utility pays. The Pennsylvania corporate net income tax law makes no reference to normalization. Unlike the Internal Revenue Code, it nowhere requires or prohibits the use of normalization in connection with the allowance or disallowance of rapid depreciation, either as a general tax benefit or that kind of tax benefit specifically denominated a "tax preference." See Tax Reform Code of 1971, Act of March 4, 1971, P.L. 6, Art. IV, Section 401, as amended, 72 P.S. §7401(3)(d) - (o), especially §7401(3)(e) (Suppl. 1984-85).

> On the other hand, normalization does affect the rates which a utility charges its customers. When the Commission uses a hypothetical state tax income expense which reflects depreciation calculated by the straight line method the rates set will be higher than rates based on the actual taxes paid unless the cost of capital is lowered enough to produce a fully offsetting reduction in the "fair return" component of the rate. There is no evidence to support such a finding on this record.
>
> Finally, since our state's tax law requires no artifical separation of assets into categories depending on when they are placed in service, no impediment appears to using a going concern analysis in dealing with state taxes. That analysis, not the separate asset analysis underlying normalization, seems to us in accord with the dynamics of the real world and we will require its use in expensing Pennsylvania taxes in the absence of contrary legislative intent. Under that going concern analysis the normalization of state taxes would on this record violate our longstanding and well-recognized doctrine of "actual taxes paid," as it has been redefined. (Emphasis supplied)

507 Pa. at 519-20, 491 A.2d at 105-106.

Staff maintains that flow through of the tax benefits relating to capitalized overheads is consistent with the established regulatory principle that only actual tax expenses (as clarified in the Barasch Opinion) are proper expenses for ratemaking. It would be inconsistent with this principle to deny ratepayers the benefits of a tax deduction which the Company consistently enjoys.

Finally, the Company proposes that Staff has erred in its claim that the Commission's decision to flow through

tax benefits on capitalized overheads in a recent Philadelphia Suburban Water Company proceeding (Docket No. R-842592) is supportive of its position. The Company proposes that the most important factor which distinguishes PECO from Philadelphia Suburban Water, is PECO's need for cash.

> This is clearly not PECO's situation in light of the cash needs for the company's continuing construction program.

(PECO Statement 23A, page 4).

Staff maintains however, that the most important factor is that PECO has failed to meet its burden of proof regarding the specific cash needs of the Company. During cross examination, the Company's own witness was unable to provide substantiation on how the Company's cash needs could be satisfied.

> Q: I would like to ask you, what sources of funds are available to the Company in order to meet these needs, just generally?
>
> A: I am afraid I am not the witness to question about the Company's sources of cash funds.
>
> Q: Would you agree that the Company's cash needs could be met by sales of securities?
>
> A: I am not in a position to answer that question.

(Tr. p. 4025, lines 16-25).

Even more damaging was the witness's inability to explain the extent to which collection of these deferrals would contribute toward the Company's "perceived" cash needs.

Q: Mr. Sileo, do you know what percentage of the Company's sources of funds are represented by the cash generated on the deferrals for capitalized pensions and taxes related to construction...?

A: No, I don't.

(Tr. p. 4026, lines 12-17).

Having failed under its burden of proof, the Company has resorted to distortion of the facts to be considered by this Commission. Company witness Sileo testified that the revenue effect of this Staff adjustment was significant ($20,000,000) in light of the Company's cash needs (PECO Statement 23B, pg. 5, lines 15-21).

Simple mathematics however, disputes this claim as Mr. Sileo has admitted in cross examination.

Q: Would you accept, subject to check, that the amount that you have identified in your sur-surrebuttal testimony as the revenue related to the capitalization of the overheads, which is $20 million, is approximately .6 percent of the total operating revenues the company is claiming in the current case?

A: First of all, my $20 million was just a basic two for one revenue requirement. It wasn't done without any calculation or without this particular thing in mind. I just used an approximate $20 million as being, revenue requirement being two times, in essence, the value.

Based on this particular thing, your numbers may very well be right, subject to check. But just to clarify, the $20 million was just a basic two for one, assuming $10 million of capitalized pensions and taxes.

(Tr. pg. 4028, lines 11-25)

Source:

Revenue Requirement of Deferrals (PECO St. 23B, p. 5) / Total Operating Revenues (PECO Ex. TPH-2, Schedule A-1) $\frac{\$20,000,000}{\$3,183,733,000} = 0.6\%$

Clearly, this Commission must find that any benefit which might be derived by the Company by collection of these deferrals will have a less than de minimis effect upon the Company's cash resources whereas it has a substantial effect upon current ratepayers. The Commission should in this case, deny the Company's current normalization claim. Ratepayers should not be required to provide additional capital to the utility under the guise of income taxes, where such capital can be acquired in the market place. (Trial Staff Statement JMH-2, page 4, lines 22-24). Additionally, the accumulated deferred taxes on capitalized overheads, exclusive of the claim for the future test year, should be returned to the ratepayers as rapidly as possible. Accordingly, the total deferred taxes allowed should reflect an additional reduction of $6,630,000 premised upon a five-year amortization as calculated in Staff Exhibit JMH-1, Schedule 1. (Staff Statement JMH-1, pg. 6, lines 9-15).

3. Amortization of Previously Collected Deferred Taxes

The Company has historically been permitted to collect deferred State income taxes in rates until most recently, when this Commission directed it to switch to flow-through at Pennsylvania Public Utility Commission v. Philadelphia Electric Company, 58 Pa. P.U.C. 743 (1985),

docketed at R-842590. At that time however, no guidance was provided as pertains to previously collected deferrals. Now however, because the Barasch Opinion has impacted recent cases before this Commission, Staff believes that sufficient rationale exists to consider adoption of an amortization policy for previously collected deferrals.

In the most recent Bell Telephone proceeding (R-842779) since the Barasch Opinion, the time frame for refunding previously deferred taxes was addressed, and this Commission ordered a five-year amortization as appropriate for same. Staff believes that the five-year amortization is the most appropriate methodology in this case also because:

1. It provides a greater probability of returning the funds which the Company has held from prior rate collection, to the ratepayers who originally paid those funds. (Obviously a greater amortization period such as remaining asset life, would significantly lessen this probability of matching the refund to the payor).

2. It provides the greatest benefit to the ratepayer over both the reasonably near future, in absolute dollars, and the long term future, on a present value basis.

3. It resembles the five year amortization procedure that the Commission has recognized as appropriate for returning excess deferred Federal income tax that resulted from the lowering of the corporate tax rate.

(Trial Staff Statement JMH-1, pg. 8, lines 1-16).

The Company, in contrast, has only stated that such a decision would be contrary to its interpretation of

past Commission decisions: that shorter amortization must be precluded by the fact that implicit in normalization is flow back of deferred taxes over the assets life (PECO Statement 23A, pg. 5, lines 1-8). Staff has responded to these claims in Staff Witness Heverling's surrebuttal testimony (Staff Statement JMH-2, pg. 3-4).

First, as Mr. Sileo stated in his rebuttal testimony: "Implicit in the normalization methodology of setting rates is the flow back of the deferred taxes over the life of the associated property". Thus, if this Commission were to do nothing more than allow reversal of accumulated deferred taxes over the remaining asset life, the Staff submits that such would represent little departure from normalization.

Secondly, while Mr. Sileo states that a shortened reversal period would be contrary to previous Commission decisions, it must be observed that this Commission has found from time to time, more appropriate methodologies to be used in the ratemaking process. Accordingly, while this Commission's decisions may have given the appearance of inconsistency or contradiction, they cannot be viewed as such because the decisions were reached premised upon consideration of the facts presented. Obviously, there are new factors before the Commission now, as pertains to normalization. These factors are in addition to those previously considered when normalization was allowed. Thus, this Commission is free to adopt the Trial Staff's recommendation of a five-year refunding methodology for previously

deferred taxes, without contradicting prior decisions. Indeed the Commission itself has recognized that every decision it makes does not rise to the stature of constituting policy. See Pennsylvania Public Utility Commission v. Columbia Gas of Pennsylvania Dkt. R-83249 (August 27, 1984).

Staff maintains that the Company has not been able to present convincing evidence for this Commission to consider whereby it could conclude that a five-year amortization policy would be inappropriate. Accordingly the balance of State deferred income taxes which have accumulated at June 30, 1985 relative to liberalized depreciation (with the exception of the portion of State deferred income taxes already being amortized to ratepayers over three years as ordered at R-842580), should be amortized and returned to ratepayers over five years. (Staff Statement JMH-1, pg. 7, lines 19-24). This recommendation to amortize over five years would have the effect of reducing total deferred income taxes (currently claimed) by $4,229,000 calculated as detailed in Staff Exhibit JMH-1, Schedule 5.

4. Tax Treatment of Tender or Call Premiums Associated with Refunding High Coupon Bonds.

In November 1985, PECO issued $250 million of 11-3/4%, 29-year and $150 million of 10-7/8%, 10-year First Mortgage Bonds. Proceeds from these issues were used to refund a portion of PECO's 17-5/8%, 18% and 18-3/4% First Mortgage

Bonds through tender offers which were completed in December 1985. PECO also proposes to call the balance of its 17-5/8% First Mortage Bonds on July 1, 1986. These changes have been incorporated into PECO's revised cost of capital calculations (PECO Exhibit JFB-3). The interest savings resulting from refunding high coupon debt with new, lower cost debt issues have been reflected in its revised cost of capital.

In connection with the refunding of these bonds, PECO paid a premium of $44.801 million to entice investors to tender them. There is also a $6.454 million premium associated with the July 1, 1986 call of the remainder of the 17-5/8% bonds. To avoid penalizing stockholders for the premiums it was required to pay to accomplish these transactions, PECO proposes to amortize the premium over 21 years, the composite term of issue for the new bonds (PECO Exhibit JFB-3, Updated Schedule 4, Page 8 of 10, Note 9). PECO has added one year's amortization in the amount of $2.441 million to the interest cost in calculating its embedded cost of debt (PECO Exhibit JFB-3, Updated Schedule 4, Page 5a of 10). In order to recover the interest expense associated with the premium (since it will not be reflected in rate base), PECO has deducted the premium amount of $51.255 million from long-term debt in its capital structure computation (PECO Exhibit JFB-3, Updated Schedule 3, Page 1 of 2).

Staff essentially agrees with PECO's treatment of the premium with the exception that PECO has not reflected the tax deductibility of the premium in its calculation. During cross-examination, Mr. Paquette agreed that PECO would take the $44.801 million premium associated with the tender offers as a tax deduction on its 1985 income tax return (Tr. p. 4830). Mr. Paquette also agreed that the $6.454 million premium which will be paid to call the remainder of its 17-5/8% bonds on July 1, 1986 will be deducted on its 1986 tax return (Tr. p. 4830). Mr. Paquette further noted that PECO would receive no immediate tax benefit from its deduction since it will not be able to use all of its tax credits and the deduction would have the effect of increasing the tax credits that would be carried forward.

Due to PECO's tax posture, Staff has not proposed a downward adjustment to its cost of capital in this case. However, this rate case is the first of many in which premiums associated with tenders or calls of high coupon bonds will be at issue. Indeed an article in the March 27, 1986 edition of the Wall Street Journal (p. 5, column 1) contains a prediction that nationwide $1 billion of utility bonds may be subject to a similar redemption. These premiums should be used to calculate the embedded cost of debt and capital structure on a net of tax basis since this method properly reflects a company's out-of-pocket cost of refunding. In PECO's case, the premium would be reduced to $25.048 million,

to reflect its deductibility for state and federal income taxes. Staff requests that the Presiding Officer and the Commission note in their orders that PECO's methodology should not be relied on as precedent in any future PECO rate filing or in any other proceeding.

V. LIMERICK ISSUES

A major issue in this proceeding is the Company's proposed inclusion into its rate base of its investment in Limerick Unit 1 and 100% of the common plant. The importance of this issue is readily apparent both from the large amounts of testimony addressed by all the parties concerning the Unit and its construction cost and eventual impact on the Company's rates and also from the unusual number of interim decisions made by both the presiding officer and the Commission concerning the consideration of the issue in this case.[8/] Another unusual aspect of this issue is the Company's unprecedented implementation of an appeal to the Commonwealth Court on several of the Commission's interim decisions while the administrative litigation in this matter continues.[9/] This portion of the Trial Staff's main brief addresses the Staff's proposed adjustments for Limerick Unit 1.

8/ See, e.g. the Presiding Officer's Memorandum Opinion of January 17, 1986 (resolving Trial Staff's Motion in Limine); Commission Opinion and Order of January 17, 1986 (entered January 21, 1986, affirming and modifying the Motion in Limine bench decision); Presiding Officer's Ruling on Staff's Motions to Strike (filed March 10, 1986); Commission Opinion and Order of March 6, 1986 (entered March 6, 1986, denying the Company's request for certification of the Commission's order of January 17, 1986).

9/ Philadelphia Electric Company v. Pennsylvania Public Utility Commission, docketed at 453 C.D. 1986. The petition for review is addressed to the Court's appellate jurisdiction, alleges an "egregious abuse of discretion" on the part of the Commission and purports to appeal the Commission's Opinion and Order of January 17, 1986 at this docket number.

A. Limerick Unit I.

The history of the Limerick Generating Station is detailed in the direct testimony of Company witness Vincent S. Boyer (PECO St. 1). The Station consists of two 1055 MW turbine generator units, each served by its own boiling water reactor system. The Company decided to build the Limerick Station as a base load unit in the late 1960's. In January 1971, the Commission entered an order granting the Company's application for a finding of necessity for the siting of the plant on the east bank of the Schuylkill River in Limerick Township, Montgomery County. A construction permit was issued for the plant in 1974.

The Company announced deferrals in the completion of the Limerick Station in 1974, 1976 and 1978. PECO submitted its application for an operating license for Limerick 1 in March 1981. After protracted hearings, the Nuclear Regulatory Commission issued a full power operating license for Limerick Unit 1 on August 8, 1985. Unit 1 entered commercial operation in February 1986. Under the Company's proposal, Limerick Unit 1 and 100% of common plant will add $3.8 billion to its rate base (PECO St. 3, p. 7).

B. PECO Retains the Burden of Proof to Demonstrate That Its Limerick Expenditures Are Reasonable.

As previously set forth in Section II of this brief, Section 315 of the Public Utility Code unambiguously places the burden of proof upon the Company to demonstrate that the rates proposed in Supplement No. 15 are just and

reasonable. This burden also places the responsibility on the utility to establish that the expenses it seeks to recover from its ratepayers were prudently and reasonably incurred. This responsibility is particularly heavy when a utility seeks to make a large and expensive addition to its rate base.

In determining such rate base claims, the Pennsylvania courts have long recognized that this Commission is not bound to blindly accept the utility's rate base valuation. In reviewing a Public Service Commission order appraising the value of consolidated operating water works for ratemaking purposes, the Pennsylvania Supreme Court observed in Ben Avon Borough v. Ohio Valley Water Co., 260 Pa. 289, 308-9, 103 A. 744, 750 (1918):

> The ascertainment of the fair value of the property, for rate making purposes, is not a matter of formulas, but it is a matter which calls for the exercise of a sound and reasonable judgment upon a proper consideration of all relevant facts. The commission is not bound to adopt any one method to the exclusion of all others. It may take into consideration various methods, and use its judgment as to the extent to which they shall be employed. The original cost of the property is not to be taken as controlling, for there may have been extravagance in purchasing, or bad management; . . . Much must be left to the sound discretion of the appraising body, the tribunal appointed by law and informed by experience, for the discharge of these delicate and complex duties. (Emphasis added.)

This language was recently cited with approval by the Supreme Court in its Opinion in Pennsylvania Public Utility Commission v. Pennsylvania Gas & Water Co., 492 Pa. 326, 340, 424 A.2d 1213, 1220 (1980) cert. denied 454 U.S. 824 (1981).

The Pennsylvania Supreme Court has also recognized that the burden to establish the value of utility plant is by statute placed on the utility. In Berner v. Pennsylvania Public Utility Commission, 382 Pa. 622, 116 A.2d 738 (1955), the Court reversed a Commission order which had improperly allocated to complainants the burden of proof concerning the reasonableness of utility plant valuation. The Court held:

> [T]he appellants did not have the burden of proving that the plant additions were improper, unnecessary or too costly; on the contrary, that burden is, by statute, on the utility to demonstrate the reasonable necessity and cost of the installations and that is the burden which the utility patently failed to carry.

382 Pa. at 631, 116 A.2d at 744 (emphasis in original). The Trial Staff submits that in view of the Commission's prior conclusions of PECO's imprudence in delaying construction of the Limerick Station, the Company has failed to carry its burden to establish that the proposed rate base valuation of Limerick Unit 1 is reasonable.

C. The Commission's Prior Determinations Concerning the Construction of Limerick Unit 1 Must Be Recognized in the Resolution of This Case.

The Commission's responsibility in this case is to render a decision that balances the interests of both the Company's shareholders and ratepayers. In examining the regulator's obligation to review the prudency of a utility's construction costs, the Public Service Commission of New York recently observed:

> The disallowance of imprudently incurred costs is fundamental to the law of utility regulation as traditionally practiced in the United States, and we regularly deny recovery of costs that have resulted from imprudent actions. These disallowances are a fundamental part of our responsibility to set just and reasonable rates and are necessary to protect the public from being victimized by the monopoly power of a public utility. If a competitive enterprise tried to impose on its customers costs from imprudent actions, the customers could take their business to a more efficient provider. A utility's ratepayers have no such choice. A utility's motivation to act prudently arises from the prospect that imprudent costs may be disallowed. We, therefore, have an obligation to impose such disallowances when warranted.

Case 27563, Proceeding on Motion of the Commission to Investigate the Cost of Construction of the Shoreham Nuclear Generating Facility, (issued December 16, 1985, Mimeo at p. 4).

This Commission has previously recognized its obligation to examine the prudency of utility management in ratemaking. In Pennsylvania Public Utility Commission v. Philadelphia Electric Co., 52 Pa. P.U.C. 772 (R.I.D. 438, 1978), the Commission found that the Company had been imprudent in supervising the construction of Salem Unit No. 1. The Commission concluded:

> While our authority to intrude into management areas may be limited, we can hold regulated utilities accountable for abuse of discretion or imprudent management in the rate-making process. We hold PECO accountable, based upon the TB&A evidence and our judgement, for $10.5 million of expenditures in the cost of Salem No. 1 which would not have been made had prudent management been exercised. This is the approximate midpoint between the $5.9 and $5.2 million savings as developed in the TB&A audit.
>
> Accordingly, we adjust the original cost of Salem No. 1 for rate-making purposes by a reduction of $10.5 million in rate base.

52 Pa. P.U.C. at 787 (emphasis added).

Although remanded upon review by the Commonwealth Court for additional findings of fact, the Court expressly affirmed that portion of the Commission's R.I.D. 438 order holding that PECO's customers were not required to reimburse the Company, through rate charges, for expenditures imprudently made. Park Towne v. Pennsylvania Public Utility Commission, 61 Pa. Commonwealth Ct. 285, 295, 433 A.2d 610, 615 (1981).

The constantly escalating cost and construction time of the Limerick station has long been a matter of concern for this Commission. In his Recommended Decision in the Company's 1978 rate case at R.I.D. 438, the presiding officer discussed the propriety of the Company's delays in the construction of Limerick Nos. 1 and 2 from 1983 and 1985 to 1985 and 1987, respectively:

> . . . Further, Limerick cannot entirely be excluded from consideration of the overall needs of the Company.
>
> * * *
>
> Cross-examination established that the delay of the completion of these units would increase the cost to the Company's customers in the sum of $1,600,000,000 over their projected life span.
>
> The Company explained that it was delaying completion of these projects for two years because of its recently lowered projected growth rate of energy and peak load from 5 per cent to 3 per cent per year, so that Limerick is not required for its reserve margins until 1985-87. By the testimony of its witness, Joseph F. Paquette, Jr., it contended that such delay would reduce construction spending by $270 million over the next three years, and that the overall effect would benefit its customers in the short run.

> Complainants urge that such delay is costly to the ratepayers, and suggest that they intend to object in subsequent rate proceedings to the inclusion of cost engendered by such delay.
>
> In our view, if such delay is to be questioned, then in fairness to the Company, to its investors and to its customers, such question should be raised and resolved now, before the delay is implemented. Once the additional cost is incurred, this Commission's recourse is limited, and the consumers' interests will not be adequately protected. On the other hand, if the investors are not to be credited with such additional expense in the ratemaking process, they should now be so informed.
>
> We recommend to the Commission, therefore, that it fully develop the prudence and the consequences of such proposed delay, to the end that a determination of the propriety and effect of such delay may be made 'before the fact.'

Recommended Decision of the Honorable Joseph P. Matuschak in Pennsylvania Public Utility Commission v. Philadelphia Electric Co., R.I.D. 438, Mimeo at p. 148-50 (emphasis added).

In its order resolving the Company's 1980 rate case at R-79060865, the Commission adopted ALJ Klovekorn's recommendation and deferred a decision on the prudence of the Company decisions to delay the construction at the Limerick station during 1975-78. Pennsylvania Public Utility Commission v. Philadelphia Electric Company, 58 Pa. P.U.C. 220, 227 (1980). The Company's actions in delaying Limerick construction in 1976 and 1978 were examined by the Commission in Re Limerick Nuclear Generating Station, I-80100341, 56 Pa. P.U.C. 47 (1982) aff'd 501 Pa. 153, 460 A.2d 734 (1983) and found to be imprudent.

The Commission's imprudency determinations in the Limerick investigation at I-80100341 have been incorporated

into this record by virtue of the Presiding Officer's ruling on the Staff's Motion in Limine and the affirmation of that ruling by the Commission on January 17, 1986 (order entered at R-850152 on January 21, 1986). The Commission addressed the intended scope of investigation of Limerick costs for this case in its Limerick investigation order. Noting that the Staff and Consumer Advocate had presented estimates of delay costs in the proceeding, the Commission began its discussion of the construction delays with the following:

> We note at the outset of our discussion, that to adopt any proposed adjustments or calculations presented to us, at this time, would be inappropriate. The record presented is inadequate to accurately gauge the costs of delay. Nor is the issue ripe for decisions. Only when the plants are complete and the attendant cost claimed will the costs of delay be susceptible to accurate assessment. Accordingly, we shall not attempt to quantify the costs of the various delays at this time.

56 Pa. PUC at 58 (emphasis added).

After reviewing the evidence and parties' exceptions, the Commission reached the following conclusion:

> Considering the foregoing, we are of the opinion that PECO management did not exercise judgement sufficient to meet our reasonable man standard in delaying construction at Limerick in 1976 and 1978. Having so found, we are requested by staff and the OCA to quantify the cost of the delay to ratepayers. We are of the opinion that to do so at this time is inappropriate. We have not been presented, in this proceeding, with a claim for recovery of any of the costs associated with the construction of the plants. Consequently, we can

> make no adjustment to any claim. Further should PECO sell all or part of the Limerick plant or its capacity to other utilities, the deduction of all or part of the costs of delay from PECO's claim, if any, would be materially affected. We therefore find it unnecessary to quantify, at this time and in this proceeding, the costs associated with the 1976 and 1978 delays.

56 Pa. PUC at 61 (emphasis added).

The Trial Staff submits that the Commission's prior order in the Limerick Investigation at I-8010034 itself limits the prudency issue in this proceeding to the quantification of the increased costs to the ratepayers resulting from the Company's construction delays in 1976 and 1978. Both the Trial Staff and the Consumer Advocate have presented substantial evidence addressing this issue. The Trial Staff submits that its proposed quantification of the construction delay cost is reasonable and should be adopted by the Presiding Officer.

D. PECO Cannot Be Permitted to Evade the Commission's Prior Findings of Imprudence.

The question before the Commission in this proceeding is an apparently straightforward one: Given the Commission's prior findings in the I-80100341 investigation, how much of the claimed $3.8 billion investment in Limerick #1 and common plant should be included in rate base at this time? An array of quantification methodologies and proposals, contained in numerous statements and thousands of transcript pages, was presented by the various parties in this proceeding, showing that the issue is by no means a simple one.

Although the Limerick #1 rate base reductions proposed by Staff and OCA are very close in amount, they were derived from fundamentally different types of analysis. Reduced to its essentials, the first of these approaches focuses on the actual, as-built construction schedule and actual costs incurred to determine what the plant should have cost. This methodology removes the escalated costs (due solely to inflation) associated with the two delays found imprudent by the Commission its Limerick #1 order from the total investment claimed by the company. The second type of analysis, presented by the OCA, is a hypothetical one, employing computer simulations to determine when Limerick #1 would have gone in service given actual constraints and conditions and therefore what the investment would have been at that time.

The first type of analysis was used by Staff in the proceeding. As is true of the second methodology, it attempts to reduce the company's claim by the excess costs that should not have been incurred. But Staff's methodology takes the Limerick #1 order in which the Commission made its imprudency findings - arrived at after a lengthy and detailed investigation - as its starting point, and identifies the costs that would not have been incurred had the company acted prudently in its construction scheduling decisions.

Staff's Limerick #1 testimony had one objective - to quantify the cost of the delays found imprudent by the Commission. This was accomplished by analysis of the actual costs incurred. As explained in more detail below, Staff recommends that PECO be permitted to completely recover (1) all costs (direct and AFUDC) incurred prior to April 30, 1981; (2) the reasonable, de-escalated direct costs incurred from April 30, 1981 through October 1984 and associated AFUDC; and (3) all direct costs (unadjusted) incurred after October 1984.[10/] To put it another way, Staff recommends that PECO recover all its investment except for the escalation in costs that occurred as a result of inflation during the delay period of April 30, 1981 through October 1984.

10/ In addition to its quantification adjustment, Staff also recommends disallowance of costs associated with 50% of common plant and exclusion of costs related to the Bradshaw reservoir (Staff Exh. RAR-1A, Schedule 1).

The advantages of this approach are obvious. First, it gives effect to the Commission's imprudency findings, thus preventing the Commission's investigation and order from becoming meaningless exercises of no impact. Second, it looks at the actual costs and schedule that occurred, making it unnecessary to base the adjustment on assumptions and suppositions as to what would have happened during the construction period. Therefore, it is not necessary for the Commission to evaluate the hypothetical effects of factors such as regulatory constraints or to rely on computer simulations. In addition, it avoids the necessity of determining the reasonableness and impact of specific items such as the Mark II modifications or NRC-mandated changes. Third, this approach results in a recommendation that properly balances the interests of both ratepayers and shareholders. The shareholders receive a return on and a return of their investment in the plant while the ratepayers are not forced to pay costs incurred because of delays found unreasonable by the Commission.

The OCA's method of arriving at a recommended Limerick #1 disallowance is radically different from Staff's. It completely ignores the Commission's order and the actual as-built schedule and instead simulates a construction schedule based on the 1974 MSCS critical path schedule provided by PECO. In addition, the OCA examined separately the reasonableness of certain items such as the Mark II modifications.

It is obvious from the extensive record adduced in this proceeding that the claimed $3.8 billion for Limerick #1 and common plant is excessive and unreasonable. Staff believes that its methodology is the most reasonable and appropriate way to quantify the effects of the 1976 and 1978 delays. Staff recognizes, however, that the analysis presented by OCA also is reasonable. Should the Commission choose not to adopt Staff's recommendation, Staff therefore urges the Commission to adopt the OCA's proposal.

1. Staff's quantification accurately identifies the escalation of construction costs caused by the imprudent delays.

At the outset it is important to emphasize what Staff's recommended adjustment is not:

- it does not purport to establish when Limerick #1 should have been completed or in service;
- it does not represent the cost of a plant that would have been completed or in service at April 1981.

Rather, Staff took the cost of the unit as actually built - including all actual quantities of materials and labor manhours - and priced it to remove the escalation in costs caused by inflation during the delay period. In other

words, Staff recommends that the Commission recognize the 1984 plant, which incorporates all NRC-mandated design changes, at a 1981 cost level.

Appendix A appended to this brief contains a complete description of the methodology used by Staff to identify the inflation-caused escalation of the cost of Limerick #1 and common plant which resulted from the company's failure to meet its 1975 schedule. This quantification forms the basis of the Limerick adjustment presented by Staff witness Robert Rosenthal in his direct and surrebuttal testimony (Staff Sts. RAR-1 and RAR-2).

The quantification analysis itself was conducted under the direction of Audit Supervisor Dennis P. Dougherty, an auditor with substantial expertise in the auditing of public utilities (Staff St. DPD-1, Appendix A; Tr. 2662-64). As explained by both Mr. Rosenthal (Staff St. RAR-2, p. 2) and Mr. Dougherty (Staff St. DPD-1, p. 2), Staff made no attempt to reconstruct a hypothetical construction schedule, evaluate construction practices or estimate overruns caused by faulty construction. Instead, Staff assumed that all labor hours and quantities of materials were reasonable and essential to the construction of the plant. What Staff did was to adjust the costs associated with the labor, materials and carrying charges during the delay period. The result is that pursuant to Staff's proposal PECO would be permitted to

recover all costs (direct and AFUDC[11/]) incurred through April 30, 1981, all de-escalated costs incurred thereafter through October 31, 1984 and associated AFUDC, and all unadjusted direct costs incurred subsequent to October 31, 1984.

Staff's quantification is derived directly from the books and records used by PECO and Bechtel to record the actual costs, labor hours, and material quantities. In those instances where costs were not directly charged to a particular facility (i.e., Unit 1, 2 or common) such costs were unitized using PECO's methodology or a methodology similar to the company's. The accuracy of Staff's data and unitization were not contested by the company. Staff Stmt. DPD-1, p. 21, Exh. DPD-26.

The next step was to adjust the direct costs incurred subsequent to April 30, 1981 through October 31, 1984, when fuel load commenced. Staff again relied on all actual data. Using the actual recorded commodities and manhours, Staff determined what the identical quantities of labor and material would have cost had they been incurred in April 1981. This was done by breaking down the actual recorded expenditures into numerous categories. The Bechtel costs were taken from the LD-160 and 330-R ledgers. The

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11/ AFUDC ("Allowance for Funds Used During Construction") is an accounting treatment which recognizes the cost of the carrying charges associated with plant investment. This amount is added to the cost of the plant included in rate base and recovered from ratepayers over the life of the plant. Limerick #1 Order, 56 Pa. PUC 47, 55 (fn. 11) (1982).

major categories were labor, materials, subcontracts, and San Francisco Home Office. Each major category was further broken down (i.e., manual labor into 9 accounts), and each subaccount was classified as direct[12/], TO suspense[13/] or general construction and preventative maintenance as appropriate. The PECO direct costs were taken from the Engineering and Research reports, which are comprised of 56 subaccounts. Each subaccount was related to the 14 direct cost categories reflected on the bi-monthly reports submitted to the Commission beginning on May 31, 1982.[14/] It should be noted that these cost allocations were consistent with PECO's own methodology.

Once the costs as of October 31, 1984 were identified, they were de-escalated to April 1981 levels. This was done for each category, account and subaccount. The labor accounts were adjusted to reflect the actual cost changes experienced and material costs were adjusted based on changes in appropriate producer price indices. Again, these adjustments were performed using the company's methodology.

12/ Direct charges are those items specifically identified in the ledger as being related to the construction of either Unit 1, Unit 2 or the common facilities.

13/ TO suspense charges are costs placed "in suspense" for later unitization.

14/ Adjustment of the PECO direct costs was based on the ratios obtained from the quantification of Bechtel's direct costs. Appendix A, pp. 13-14; Staff Stmt. DPD-1, pp. 20-21. Use of these ratios to de-escalate the PECO direct costs was not contested by the company.

Several samples of these calculations are included in the exhibits provided by Mr. Dougherty. For example, Exh. DPD-1 shows how Labor Account 50 (Piping) was adjusted. First, a dollar per hour figure was derived using the costs and hours contained in Ledger LD-160. The unit cost as of October 1984 was $20.5881; as of April 1981 it would have been $16.1466. The difference of $4.4415 was multiplied by the actual labor hours experienced from April 1981 through October 1984 to get the excess costs that should not have been incurred. The result is that the company recovers all hours (3,814,203) but at the $16.1466 wage rate. The same methodology, employing the appropriate producer price indices, was applied to derive the reasonable material, subcontract and Bechtel Home Office costs, again on the basis of all actual quantities used in construction of the plant.

Next, Staff recalculated the amount of AFUDC that would have been accrued on these adjusted direct costs. So as to not unduly penalize the company, all these deescalated costs were assumed to have been incurred at April 1981 levels. This assumption benefits the company because had Staff used in its analysis a hypothetical construction schedule, these costs would have had to have been incurred throughout the 42-month period[15/] prior to April 1981 at wage and cost levels lower than those at April 1981. (Staff

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15/ This 42-month period is the number of months between April 1981 and the actual commencement of fuel load for Limerick #1.

Stmt. DPD-1, p. 18). Again, to be conservative, AFUDC associated with these reasonable, adjusted costs was calculated on the basis of the 42 months prior to April 1981. This is consistent with Staff's position that the Commission should rely on actual data as much as possible, rather than on a simulated construction schedule.

In conclusion, it can be seen that Staff's quantification methodology accurately identifies the escalated costs that occurred during the delay period of April 1981 - October 1984. It is significant that, as discussed infra, the company was unable to show that this analysis was flawed in any way. While PECO objects to the application of this quantification, even its own witness Clarey agreed that the costs which formed the basis of Staff's adjustment were taken directly from the company's books, and that the escalation identified by Staff for the period April 1981 through October 1984 actually occurred (Tr. 5079-80).

2. Staff's adjustment properly balances the costs of construction with the effects of delay.

As explained supra in this brief, there can be no argument that PECO's delay decisions in 1976 and 1978 were not only imprudent but resulted in excessive costs that would not have occurred had PECO met its original in-service date of April 1981. The quantification which forms the basis of Mr. Rosenthal's Limerick recommendation conservatively identifies those excess costs.

It is significant that PECO offered few substantive criticisms of the methodology employed by the team of Staff auditors or the accuracy of the results produced by that analysis. Even its own witness clearly agreed that Staff's adjustment is based directly on the actual experienced costs and that the cost escalation determined by Staff actually occurred (Tr. 5079-80). Rather, the response of the company to Staff's testimony has been addressed to the application of that methodology, coupled with unwarranted and irrelevant attacks with respect to one of Staff's witnesses.

a. The thrust of PECO's criticism is that Staff's adjustment is unrealistic.

This contention encompasses virtually all of PECO's criticisms with respect to Staff's quantification. Basically, it is PECO's position that Staff's adjustment is "unrealistic" because (1) it assumes an "achievable" in-service date of

April 1981; (2) ignores the actual pattern of expenditures, variations in the labor force and overtime; and (3) fails to recognize the 15-month period used for power ascension testing.

As discussed in more detail below, all of these arguments arise from PECO's failure to accurately state the basis for Staff's adjustment, and therefore are irrelevant.

(1) Use of April 1981 as the start of the delay period.

Numerous PECO witnesses have attacked Staff's use of the April 1981 date in its computations. See, Clarey, Stmts. 4A & 4B; Boyer, Stmts. 1A & 1B; Sproat, Stmt. 6A; and Love and Kononetz, Stmts. 8A & 8B. For example, witness Love states in Stmt. 8A, at p. 15, that Mr. Dougherty "several times" "refers to April 1981 as the achievable in service date for Limerick #1."

These witnesses uniformly ascribe this "error" to Mr. Dougherty's inexperience and incompetence. See, Clary, Stmt. 4A at p. 25, Stmt. 4B at p. 2; Boyer, Stmt. 1B, p. 2; Love/Kononetz, Stmt. 8A, p. 44 for examples. Staff is dismayed by this unwarranted attack on Mr. Dougherty's credentials. While not as blatantly egregious as the company's allegations with respect to the ethics of OCA witness O'Brien, the company's statements are uncalled for and irrelevant because they mis-state Mr. Dougherty's role in this case. While the audit was conducted under the direction of Mr. Dougherty, it was Staff

witness Rosenthal who incorporated that analysis into his testimony and who was Staff's Limerick adjustment witness. Conveniently, PECO completely refuses to acknowledge that Staff's Limerick adjustment was presented by Mr. Rosenthal, not Mr. Dougherty. There can be no dispute that Mr. Rosenthal is eminently well-qualified to make such a recommendation. For years he has been involved in virtually every major proceeding involving electric utilities, including cases concerning rate base recognition of new nuclear units. For example, Mr. Rosenthal was involved in the separate PP&L cases which sought recognition of Susquehanna Units 1 and 2.

The fact is that Mr. Dougherty's expertise in the field of auditing public utilities is exactly what was required here. Mr. Dougherty, as explained in his direct testimony, has substantial Commission in experience in auditing the books and records maintained by jurisdictional utilities. Mr. Dougherty noted that Staff's approach toward quantification of the delays did not require analysis of the impact of the NRC-mandated design changes or reasonableness of the work done. Instead, the Staff methodology assumes that all labor man-hours and material commodities actually used were necessary for the completion of the plant. No adjustment is made to any of these quantities; Staff only adjusted a portion of the cost of the expenses incurred during the delay period. Staff Stmt. DPD-1, pp. 2-3.

Staff respectfully submits that PECO was able to establish no reason why April 30, 1981 should not be considered the start of the delay period. The company does not, and

indeed, cannot challenge the fact that in 1976 the completion date for Limerick Unit 1 was delayed from April 1981 to April 1983. See, Limerick #1 order, p. 11; Staff Stmt. RAR-2, p. 2; Exh. RAR-2A, Schedule 2. To put it another way, the Commission found the decision in 1974 to delay completion until April 1981 was reasonable; that was the last delay decision that the Commission found prudent.

The company has attempted to obscure the issue by pointing out that it followed the practice of maintaining simultaneous schedules for internal and external purposes. Thus, while the "publically announced" completion date was April 1981, the "internal construction schedule" contained a completion date of February. See, PECO Stmts. 1B (Boyer) and 8A (Love/Kononetz). Frankly, the only purpose Staff can see in these discussions by the PECO witnesses is the desire for a red herring. Obviously, all the Limerick workers, subcontractors, vendors and Bechtel itself through its on-site personnel were aware of the "public" schedule. Merssrs. Boyer & Love admitted this obvious fact (Tr. 5039-40, 5182-83). While the advanced date may have been used for PECO's internal reporting purposes (Tr. 5042-43), the fact remains that it was the April 1981 date that was stated on all the company's official filings such as to the SEC and to this Commission (Tr. 5052-53), as well as in the company's own annual reports (Tr. 5053). Obviously, if PECO had intended that the advanced completion date be achieved, it would have had incentive clauses in its contracts with Bechtel, vendors, and subcontractors. This was not done.

Therefore, there can be no doubt that, as recognized by the Commission in its order and agreed to on the record by PECO witnesses in this case (Tr. 5181-82) the company, prior to its 1976 delay decision, intended that Limerick #1 be in-service by April 1981. Staff agrees that the Commission in its Limerick order made no specific finding as to when-absent the imprudent delays-the unit should have been placed in-service. The reason the Commission did not make such a finding was the decision that this determination was premature at that time. As the Commission stated at p. 1 of its order:

> In rendering a decision in this investigation, we are aware that our options are limited. Unlike a traditional ratemaking case, in this proceeding we are not presented with any claim which would affect current rates or rates for the immediate future.

Later in the opinion the Commission explained in more detail its opinion that it could not make any findings as to the effect of the delays. First, as noted above, there was no claim for recovery of any Limerick costs. Also, the Commission recognized that PECO could sell all or part of the plant or its capacity (Opinion and order, p. 17). It must not be forgotten that when the Commission issued this order in May 1982 the imprudent delays had already been put into effect.

It should be noted no other announced delays occurred during construction of project; the unit, however,

has still been delayed 10 months past the announced date of April 1985 established in 1978. This was a delay strictly due to post fuel load starting problems.

As the Commission made no finding as to when Limerick should have been completed had the imprudent delays not occurred, Staff thought it appropriate to present an analysis which did not require reliance on the assumptions and after the fact speculations upon which PECO's various analyses are premised. Staff's adjustment rests directly on (1) the company's own projected in-service date for Limerick and (2) the actual costs entered on the company's books. Thus, Staff's approach also is consistent with the Commission's Beaver Valley 1 decision discussed. infra. For the reasons stated above and elsewhere in this brief, Staff respectfully submits that the use of April 1981 to calculate the start of the delay period, not as a achievable completion date, is manifestly appropriate and reasonable.

(2) Pattern of expenditures, labor composition, and overtime.

Various PECO witnesses have alleged that Staff's quantification should be rejected because it fails to reflect the actual pattern of expenditures, changes in the composition of the labor force, and the use of overtime. See, Clarey, Stmts. 4A & 4B; Love and Konometz, Stmts. 8A & 8B.

Staff readily agrees that the contention with respect to the expenditures is accurate. While all pre-April 1981 and post-October 1984 direct costs are not adjusted, expenditures during the delay period are assumed, for purposes of the direct cost analysis, to have occurred in October 1984 and were de-escalated to April 1981. Then AFUDC was calculated, using actual accrual rates, as if those expenditures had been incurred on a levelized basis throughout the 42-month construction period prior to April 1981.

The simple response to PECO's assertions is the same as that presented above; Staff did not perform a simulated or speculative critical path analysis. As stated by Staff witness Rosenthal in Stmt. RAR-2, p. 4:

> Staff's objective was not to recast the construction schedule or supporting expenditures but to reasonably estimate the impact of not meeting the 4/81 in-service date.
>
> * * *
>
> The rebuttal claims of the pattern of construction costs, integration of fuel load dates and financing capability are irrelevant to the approach Staff employed in assessing the costs associated with the delays found imprudent by the Commission. Again, Staff has not attempted to reschedule construction of the unit but has limited its approach to quantifying the cost of the delays previously found imprudent by the Commission.

As explained supra in Section 1, in which the quantification methodology is explained, it is correct that

costs are slightly overstated because of the assumption that they were incurred in October 1984. On the other hand, by de-escalating them only to April 1981 and not throughout the preceeding 42 months, there is an offsetting understatement. Thus, no error has been shown to result from use of staff's methodology.

The company has raised a similar assertion with respect to the labor costs derived by Staff. PECO contends that Staff's adjustment reflects more than the escalated wage rates by failing to take into account overtime and the actual variation in the composition of the labor force. For the reasons stated above, these factors are essentially irrelevant. In addition, it should be noted that the auditors did not determine the increased labor costs due to inflation by applying one over-all wage rate to all types of crafts-people. Instead, separate calculations were made for each of the nine major accounts utilized by the company to record the project's labor costs (Staff Stmt. DPD-1, pp. 8-9). This procedure was used for both manual and non-manual labor.

The other criticism made by PECO with respect to the labor component is the failure to separate overtime and straight-time labor hours (See, for example, Clarey, Stmt. 4A, p. 25). He states that during the delay period of April 1981 through October 1984, non-manual and manual labor increased 15.6% and 8.8%, respectively when compared to the overtime experienced prior to April 1981.

Staff is surprised to see these percentages, since both during Staff's audit as well as during the discovery conducted in this proceeding, the company was unable to provide the overtime applicable to Limerick Unit 1 and common. See, Tr. 2703; OCA Exh. 89. It is obvious that, unless the company lied to Staff and OCA, those percentages must be applicable not to just Limerick #1 and common but to Unit 2 as well. Therefore, these percentages are of no probative value in this proceeding. This is in contrast to Staff's labor cost quantification, which is derived solely from the escalated wage rates at Limerick #1 and common.

(3) Post-October 1984 expenditures.

Criticism of how Staff treated the post-October 1984 expenditures was expressed by PECO witnesses Clarey (Stmt. 4A, p. 24) and Love/Kononetz (Stmt. 8A, p. 48B, p. 52). Mr. Clarey states that "Mr. Dougherty ignores the substantial direct costs actually incurred during Limerick's start-up." Staff is at a loss to understand Mr. Clarey's testimony in light of the fact that pursuant to Staff's adjustment PECO would be permitted to recover all direct costs - unadjusted for inflation - incurred after October 1984. What Staff is recommending the Commission disallow is merely the AFUDC associated with these costs. The reason for this is that the AFUDC would not have been accrued had the plant been completed sooner.

Mr. Clarey also makes the point that if Staff's analysis had included the 15-month start-up period, the recalculated AFUDC would have been spread over 57 months rather than the 42 months used in Staff's quantification. First, Mr. Clarey, alluding to Staff witness Dougherty's alleged ignorance, states that he "should" have been aware when the analysis was performed in 1984 that, after the TMI-2 incident and the increase in NRC licensing requirements after 1976, a period of more than six months would have been required for the power ascension testing (TR. 5081). Yet, the fact is that the April 1981 in-service date projected by the company in 1975 incorporated a six-month testing period, and that same expectation was included in the bimonthly reports submitted by the company to the Commission up through January 31, 1985 (Tr. 5082-85).

In addition, while there was a 15-month period between fuel load and commercial operation, this was not entirely due to power ascension testing requirements. PECO witness Pacquette, Vice-President - Accounting and Finance - stated in the cover letter which accompanied Bi-Monthly Report #6 submitted to the Commission on March 25, 1985:

> Construction of Limerick Unit No. 1 is finished and low power-tests have been completed. Although Unit No. 1 is ready to begin the full power test, the Company does not expect to receive a full power license from the NRC before late April 1985. Because of this, we have changed the anticipated schedule and final cost for Limerick Unit No. 1 and common plant.

This information is shown in the report itself. See, Sections I and III.

What this report makes clear is that 5% testing was completed in February 1985, but the next phase of testing was delayed until August. The result is that over 5 months of delay in the start-up period (during which AFUDC continued to be accrued) was due to licensing complications rather than to testing requirements.

The company in its sursurrebuttal has made much of the $12 million net "error" it says Mr. Dougherty admitted. PECO Stmt. 4B, p. 2. There is no error for the following reasons. First, as explained by Mr. Dougherty, that $12 million was the result of a very rough calculation. It was not derived from application of staff's quantification methodology but instead simply utilized a ratio (Tr. 2681). As explained further, that rough estimate was presented to demonstrate that the net effect of permitting recovery of the post-October 1984 start-up costs (i.e., not including those costs in Staff's quantification)[16] was an overstatement in the Staff calculated cost of delay of only $12 million, not the $631 million presented by the company during Mr. Dougherty's cross-examination. (Tr. 5062).

16/ It must be remembered that Staff's adjustment is a proposed disallowance from the company's claim; any costs not included in Staff's adjustment therefore are recoverable by the company.

In point of fact, even that $12 million is an overstatement. If the actual 15-month period is used to accrue AFUDC, the net effect is reversed to $5 million reduction (the difference between the $13 million of AFUDC that would have been allowed and the $18 million of start-up costs that would have been de-escalated). If the more reasonable start-up period of six months instead is used in this calculation, the net effect is that the disallowance would be increased to $12 million (Tr. 5062).[17/] Thus, it can be seen that under either scenario the effect - whether positive or negative - is de minimus in comparison to both the adjustment recommended by Staff in this proceeding, and the total cost of $3.8 billion claimed by PECO.

b. Other PECO contentions

The only other criticism of Staff's methodology advanced by PECO was that Staff failed to take into account the PURTA taxes capitalized from April 1981 through April 1982. Staff agrees that it did not reflect these taxes in its analysis for the following reasons.

First, as explained by Mr. Dougherty in Staff Stmt. DPD-1 at p. 6, the amount of these taxes was insignificant. See Staff Exh. DPD-30, appended to Staff Stmt. DPD-1.

17/ Effect of Adjusting Post 10/84 Direct Dollars

	42 months	15 months	6 months
Start-up costs de-escalated to 4/81	($18)	($18)	($18)
AFUDC accrual	$30	$13	$ 6
Net Change	$12	($ 5)	($12)

Tr. 5062.

Second, as noted by Staff witness Rosenthal, PECO was the only utility which capitalized PURTA taxes during this period, thus adding to its financing requirements and diverting cash from the Limerick project itself (Staff Stmt. RAR-2, pp. 8-9).

Third, to the extent that any of PECO's investment in Limerick is disallowed by the Commission, then the PURTA tax expense was improperly inflated (Staff Stmt. DPD-2, p. 6).

Therefore, Staff respectfully submits that this assertion is insufficient to demonstrate flaws in Staff's analysis.

c. Staff's adjustment is reasonable and should be adopted by the Commission.

Staff is amused by PECO's characterization of Mr. Rosenthal's Limerick adjustment as consisting of "imprecise approximations and unsupported assumptions" (Clarey, Stmt. 4B, p. 2). There can be no doubt that Staff's analysis, presented by two of the most knowledgeable Commission employees, is less "imprecise" and "unsupported" than that presented by PECO. PECO's entire Limerick presentation - purchased at a cost in excess of $4 million (Staff Exh. 23) - is comprised of after the fact rationalizations, such as the speculative impact of the NRC design changes. It is noteworthy that PECO never in its numerous pieces of Limerick testimony acknowledges

that in 1976 and 1978 it delayed construction of the project. In fact, the only reference to those delays was made by Messrs. Love and Kononetz, who on the record refused to agree that, indeed, those decisions had been found imprudent by the Commission (Tr. 5180). These gentlemen's warped view[18/] of the Commission's Limerick order is apparent by their reference to "delay announcements" (Stmt. 8B, p. 2). This terminology is a obvious attempt to give the erroneous impression that these "announcements" had no substantive impact.

In contrast, Staff did not deem it appropriate to develop a speculative schedule as to when Limerick would have been completed but for the two imprudent decisions and the delay that resulted therefrom. Staff instead worked directly from the company's ledgers, using in its analysis the actual duration of the construction and the actual quantities of materials and labor. The result is that not even the company challenged the accuracy of Staff's quantification.

In addition to its accuracy, Staff's adjustment should be adopted by the Commission because it is extremely conservative, while not forcing the company's ratepayers - who already pay rates which are among the highest in the nation thanks to PECO's management - to pay excessive costs. Staff's proposal merely identifies the delay period which

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18/ Perhaps Mr. Love's incomplete understanding is due to the fact that he did not even read the whole order. (Tr. 5190). For this reason alone, separate from the manifest other errors in Stmt. 8B, it is clear that Mr. Love's pronouncements on the order should be given no probative weight whatsoever.

resulted from the company's failure to meet its own projected in-service date. The escalated costs caused by inflation during that period (and, of course, associated AFUDC) are really all that Staff is recommending be disallowed.

The conservative nature of Staff's recommendation is obvious from comparison with the costs claimed by PECO. For example, the total direct costs incurred through October 1984 are $2.2 billion (Staff Exh. 26, Table C-2); of that amount, Staff is recommending disallowance of but $192.7 million (Staff Ex. DPD-4), or 8.8%. The adjustment made by Staff to the direct costs incurred during the delay period is only 4.56% on an annual basis.[19/]

The same conservatism is true of the AFUDC component of Staff's calculation. Not only is all pre-April 1981 AFUDC allowed, but the AFUDC associated with the delay period was spread over the 42-months prior to April 1981. This calculation was tilted even more in favor of the company by employing an assumption that all delay-period dollars were spent on the first day of each six-month period (Staff Exh. DPD-29). Also, PECO's actual AFUDC accrual rates were used to compute the AFUDC associated with the

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19/ Staff's adjustment $192,735,190
Direct costs incurred subsequent to April 1981 $1,220,144,472
Staff's adjustment as % of direct costs 15.8%
% ÷ 42 months 0.38%/month (4.56%/year)

Source: Exh. DPD-280

de-escalated expenditures. The magnitude of the AFUDC component of Staff's recommendation is not the result of any extreme adjustment but rather is due to the compounding effect over the additional 42 months resulting from the delay decisions.

The reasonableness of the disallowance recommended by Staff can be shown by two other relevant comparisons. First, although the results of a completely different methodology, Staff's derived monthly cost of delay is very close to that of the OCA:

	Staff	OCA
Recommended disallowance	$1,119,687,820[1/]	$792,700,000[2/]
÷ months of delay	42 months	27 months
Delay cost per month	$ 26,659,234/month	$ 29,359,259/month

1/ from Exh. DPD-4.
2/ from OCA Stmt. 1B, p. 3.

In addition, as noted by Mr. Rosenthal in his direct testimony, the reasonableness of Staff's adjustment - and the excessiveness of the costs claimed by the company - is clear from comparison to the costs incurred by PP&L in connection with Susquehanna Unit 1 (and 100% common):

	Limerick	Susquehanna
Company claim	$3.82 billion	
Staff adjustment	(1.12) billion	
Net cost	$2.70 billion	$2.40 billion

Thus, even if Staff's adjustment is adopted by the Commission, PECO will be permitted to include in rate base approximately $300 million more than the cost of a nearby, contemporaneous, plant.

There are other reasons why Staff's adjustment should be adopted by the Commission, in addition to its accuracy and reasonableness. The foremost reason is that it gives effect to the Commission's Limerick #1 order by recognizing that the plant was not completed unti 1986 primarily because PECO intentionally delayed construction. In light of the inflation that occurred during that period, and the diminution over time of the energy savings to be realized by Limerick #1, these delays undoubtedly were contrary to ratepayers interests.

Finally, Staff's approach is consistent with the Commission's decision with regard to the extended Beaver Valley outage previously found inprudent by the Commission.

In its Opinion and Order Nisi upon Reopening, the Commission was faced with the task of calculating the generation lost as the result of an extended outage. Several methodologies were presented, including use of a proxy capacity factor (OCA) and a hypothetical scenario (Staff). Investigation upon the Commission's own Motion into the Extended Outages of the Beaver Valley I Generating Station, I-79070314, Opinion entered December 13, 1982. The Commission rejected the hypothetical approach presented by Staff:

> The parties have taken two approaches in attempting to quantify the costs involved in replacing the power not generated by Beaver Valley because of the NRC Show Cause Order. The Staff and Duquesne have approached quantification of "replacement power" by hypothesizing what would have happened, but for the Show Cause Order.
>
> * * *
>
> The OCA and PAJE vigorously oppose the Staff and Company positions. In their view any attempt to hypothesize what would have happened, but for the NCR Show Cause Order outage, effectively gives the Company credit for two refueling outages, the hypothetical one during the March-August 1979 period and the actual outage commencing in December 1979 . . . The OCA position and that of PAJE is essentially that the March-August 1979 outage period is a period forever lost from the life of Beaver Valley . . .
>
> As to the merits of these positions, it seems irrefutable that since five months of generation have been lost from whatever operating life which Beaver Valley shall have . . . Consequently, in our view, there is nothing in the language of the specification of the issues upon reopening which mandates the hypothetical approach. . . . Therefore, in our view, the appropriate conclusion is that urged by the OCA and PAJE, which is that Duquesne be determined to be liable for the entire outage, because some five months of the service life of Beaver Valley have been forever lost.

Opinion and Order Nisi, at pp. 8-9.

The Commission later in that order made its position even clearer:

> . . . our approach is not to attempt to recreate what would have happened, but for the NRC Show Cause Order, but rather to price out the value of the loss of of a period from the operational life of this plant.

Opinion and Order Nisi, p. 20.

The Commission maintained this position in its Opinion and Order Upon Consideration of Comments to Order Nisi Upon Reopening, reported at 57 PaPUC 371 (1983). The Commission there stated:

> Rather than engage in a hypothetical exercise as to what would have happened if the Show Cause Order had not been issued, we chose to approach the subject of quantification of replacement power costs by treating the outage period as a five-month interruption or loss from the useful life of Beaver Valley, . . . 57 PaPUC at 386, emphasis supplied.

Further, the Commission declared:

> We have rejected the approach of recreating what could or would have happened during the March-August 1979 period . . . 57 PaP.U.C. at p. 389, emphasis supplied.

If the term "delay" is substituted for "Show Cause Order" or "outage," then the reasonableness of Staff's quantification is apparent. While there is no question of double credit for refueling in the case at bar, the analogous issue in the present proceeding is the extent of the NRC-mandated design changes. As with the approach adopted by the Commission in its Beaver Valley decision, Staff's methodology does not require examination of the reasonableness of

those changes or analysis of their impact on the Limerick schedule. Instead, Staff has "priced out" the costs associated with the imprudent delays.

It is obvious from the extensive record adduced in this proceeding that the claimed $3.8 billion for Limerick #1 and common plant is excessive and unreasonable. Staff believes that its methodology is the most reasonable and appropriate way to quantify the effects of the 1976 and 1978 delays. Staff recognizes, however, that the analysis presented by OCA also is reasonable. Should the Commission choose not to adopt Staff's recommendation, Staff therefore urges the Commission to adopt the OCA's proposal.

3. The record is clear that PECO's delay decisions resulted in increased and unnecessary costs.

At the outset it is appropriate to remember two undisputed and indisputable facts: First, Limerick #1 was not completed and in-service until February 1986 because the company deliberately delayed construction in 1976 and 1978. Second, without even considering whether these delays resulted in any excess costs, the Commission unequivocably found that the company's delay decision had been imprudent. It also must be remembered that the Commission made other findings with respect to Limerick #1 in its order. Specifically, the Commission found that "the public interest requires... the timely completion of Limerick Unit 1." (Order at pp. 23-24). The Commission went on to state at p. 24:

> As of this point in time, customer savings associated with the completion of the units still do exist, albeit smaller in magnitude that if the original construction schedules had been adhered to. Further delays of both units will only further erode, and might possibly extinquish, the remaining savings. (Footnote omitted, emphasis added).

It apparently is the company's position in this proceeding that the intentional construction delays really never occurred, that the failure to achieve the company's own projected in-service date of April 1981 was due entirely to factors, primarily the NRC, outside the PECO's control.

OCA witness O'Brien was exactly on point when he declared "Thus, in spite of all of PECO's 'even if' speculations, the simple fact is that Limerick was not completed sooner because PECO did not try to complete it sooner." (OCA Stmt. 1B, p. 3).

It is clear from the record adduced both in this proceeding and in the Limerick investigation that PECO simply did not mean Limerick to be in-service before 1985. The reasons are obvious: As found by the Commission, the overriding concern on the part of the company in deciding to delay was its fear of an excess capacity adjustment. The company's own analysis at the time demonstrated net customer savings by accelerating the project (Staff Exh. RAR-2A, Schedule 3). Yet the company rejected acceleration and adopted delay strategys. The company also was aware that as long as construction was not suspended or completed, it could accrue AFUDC. It is elemental that while AFUDC is a form of non-cash earnings, it does represent a substantial asset to the company because when it is included in base rates, it will increase the basis upon which the revenue requirement is calculated. Because the Commission allowed PECO extraordinarily high return equity rates during this period[20/], the AFUDC accrual rate also was quite high.

20/

	Commission Allowed	Company Requested
R-79060865	14.35	15.00
R-80061225	15.75	16.00
R-811626	17.75	18.00
R-822291	16.75	17.75
R-842590	16.75	17.50

The corporate wishful thinking which underlies the company's presentation in the case at bar has been used by PECO in previous attempts to evade responsibility for its actions. For example, in the ECR #8 proceeding, it was the company's position that there was no net generation lost despite the fact that a baseload nuclear plant was out of service for an extended period. This "yes but" analysis was completely rejected by the Commission. The Commission at p. 62 impliedly adopted the Recommended Decision in which the Administrative Law Judge stated:

> The company claims that there has been no net loss of generation as the result of the outage...
>
> Staff respectfully submits and we agree that [PECO's] arguments are probative of nothing whatsoever -- they are, in fact, irrelevant and misleading. <u>These arguments are irrelevant because they rest on the assumption that loss of output due to demonstrated managerial imprudence can be nullified simply because -- for reasons having nothing to do with the outage</u> -- the plant performed well until its next, unplanned, forced outage.
>
> * * *
>
> Staff urges the Commission not to lose sight of the most important fact in this proceeding, which is that the outage actually occurred. We agree. The 1983 outage at Salem I wasn't planned, and as shown by Dr. Hanauer, could have been prevented. But for the failure of the UVTA's to perform as expected, the unit would have been in operation for the months of the outage and, based upon its actual performance, would have operated very well. There is simply no way PECO

> can establish that its system (and rate-payers) were not affected by the loss of this low-cost base unit.

Recommended Decision, pp. 75-79 (emphasis supplied).

An analogous argument was raised by Duquesne in the Beaver Valley proceeding. At 57 PaPUC 389, the Commission rejected Duquesne's assertion with respect to "the 'extensive other work' performed during the outage which shortened subsequent outages and also the fact that, even without the NRC Show Cause Order, Beaver Valley would have been shut down for refueling and other matters." Instead the Commission found, "We have rejected the approach of recreating what might, could or would have happened during the March-August 1979 period... these considerations are not germane."

Staff respectfully submits that PECO's contention that the delay enabled it to incorporate NRC-design changes similarly should be rejected by the Commission.

There can be no doubt that the delay in construction was translated into increased costs, primarily due to the compounding effect of AFUDC. This point was made repeatedly by PECO's own witness, Mr. Vincent S. Boyer, Vice-President - Nuclear. Mr. Boyer on redirect examination stated that:

> We, in the engineering and in the field, realized that completing the plant as rapidly as possible would result in the lowest capital cost expenditures for the plant.
> (Tr. 5043).

In response to a later question in his redirect examination, Mr. Boyer noted that "the AFUDC was a large part

[of the increase in costs] and the only way to reduce that is to get the plant completed on an earlier schedule." (Tr. 5050)

Mr. Boyer repeated his opinion yet again:

> BY MR. DELANEY:
>
> Q. I just have one or two questions, Mr. Boyer. On your redirect Mr. Hall asked you some questions about the company's practice of the dual construction dates and publically announced completion dates. I understood one of your initial responses to these questions to be that the company's practice in doing this resulted from their realization that the faster the plant was completed the less expensive it would be to construct?
>
> A. The Engineering Department's view was always that the quicker we could get the plant completed, the capital costs would be the least amount, since AFUDC is an overriding cost. (Tr. 5052).

Despite this straightforward recognition of reality by one of its own most knowledgable witnesses, PECO presented other testimony which purported to show that the increased costs were not caused by its actions, but primarily resulted from NRC-mandated changes and requirements. As shown above, similar arguments advanced by PECO and by Duquesne have been rejected by the Commission. PECO's specific contentions will be addressed below.

a. PECO's attempt to shift responsibility for the delay in completing Limerick onto the NRC should be rejected by the Commission.

It is apparently PECO's position in this proceeding that it never really intentionally delayed construction of Limerick, that the plant could not have been completed much sooner than it was because of regulatory constraints. As discussed supra, Staff demonstrated the inappropriateness of this argument in general terms and noted how the Commission previously has rejected similar attempts on the part of utilities to evade responsibility for their imprudent actions. In addition, there are specific reasons why PECO's presentation with respect to the impact of the NRC's actions should be rejected.

First, the company has been unable to sustain its burden of establishing that the Nuclear Regulatory Commission is the proximate cause for all cost increases and delays in the construction of nuclear generating stations in general and Limerick in particular.

The obvious fact is that the NRC is not concerned with cost considerations, but is entrusted with the mandate of ensuring that utilities have met the NRC safety requirements. No determination is made to determine how efficiently or economically a particular utility has achieved the required level of safety. Certainly the NRC does not investigate whether or not a utility meets NRC requirements in the most cost effective manner.

PECO witness Mattson (Tr. 951-52) agreed that the primary focus of the NRC is on matters related to safe operation of nuclear power plants. When questioned further about the extent of the NRC cost/benefit analyses, Dr. Mattson stated:

> Of course, NRC does not do this cost/benefit analysis -- usually does not do it on a plant-specific basis. It does the cost/benefit balancing on a generic basic trying to estimate the costs of a typical plant, not a particular plant. That cost estimating is done to satisfy NRC's legal requirements to regulate in the public interest. Tr. 953.

Dr. Mattson, in his direct testimony, further demonstrated how little weight was given to cost consideration with respect to PECO's response to NRC requirements:

> In some areas, such as the TMI action plan and the ASME code, it was far better to make the necessary design changes than to appeal them. They did not detract from safety, and NRC was not interested in cost considerations, so there was no viable counter arguments. (PECO Stmt. 9, p. 53).

In addition, Staff respectfully submits that the mere fact that PECO has met the safety requirements imposed by the NRC does not prove that the company has acted prudently in all areas. This Commission's determinations of prudence are not preempted by the NRC's final approval of the company's Safety Analysis Report or the NRC's granting of an operating license. The approval of the Safety Analysis Report and the granting of an Operating License by the NRC only indicates

that the company has met NRC safety requirements, not that the construction project has been managed prudently in terms of avoiding excess or unreasonable costs.

PECO has relied on excerpts from the Systematic Assessment of Licensee Performance Reports (SALP), which were prepared by the NRC, as evidence of a favorable assessment of management performance by an independent outside agency. SALP reviews, however, are concerned with investigating how well management responds to NRC concerns and are used by the NRC to determine how NRC inspection resources can best be deployed. NUREG 1055 at pp. 7-13 (IR-PECO-IV-6) provides a brief explanation of the NRC's program for the Systematic Assessment of Licensee Performance:

> (3) Systematic Assessment of Licensee Performance
>
> Following the Three Mile Island accident, the NRC initiated a program for the Systematic Assessment of Licensee Performance (SALP). The SALP program consists of periodic reviews of regulatory performance of nuclear power plants (both under construction and in operation) by a team of inspectors, licensing staff and regional supervisors and management. The SALP assessment is intended to be sufficiently diagnostic to provide a rational basis for assessing licensee performance, for allocating NRC inspection resources, and for providing meaningful guidance to licensee management. The SALP assessment is based on a review of inspection data, licensing staff input, licensee performance in areas such as deficiency reports (Licensee Event Reports and reports submitted pursuant to 10 CFR 21 and 10 CFR 50.55e reporting requirements), and

> licensee responsiveness to Inspection and Enforcement Bulletins and other suggestions for improvement. Each of nine or ten functional areas is evaluated and is assigned to one of three categories to indicate whether more, less, or about the same level of NRC inspection attention and licensee attention is appropriate for the coming period. The SALP program represents an effort by the NRC inspection program to better address management capability and competence. The SALP program is also discussed in Section 2.4.1.

Dr. Mattson has quoted extensively from SALP Reports. It should be noted that those passages specifically refer to quality assurance and licensing activities (PECO Statement No. 9, pp. 55-56). If PECO attempts to rely upon SALP reports as evidence of management efficiency, the company also must be willing to accept those areas of the SALP reports which show indications of management inattention. For example, Dr. Mattson quotes from the January 16, 1984 SALP report:

> Overview
>
> The licensee has continued to manage the construction program for Units 1 and 2 well. By providing knowledgeable staffs, and by effectively controlling the Constructor and Architect-Engineer, the licensee has achieved a requisite level of quality. Additionally, the technical knowledge and expertise of the licensee's construction Quality Assurance organization has contributed substantially to the overall effort.

Dr. Mattson does not include the other two paragraphs from this overview. The complete statement is more critical of management and states:

As Unit 1 entered the preoperational phase, the permanent plant staff, including the Startup organization, has assumed increasing levels of responsibility for project activities. Most of these activities have been well done, including those associated with system turnover and acceptance, and with assembling and training permanent operating staffs.

However, there have been indications that the permanent plant staff has not always been sufficiently cognizant of construction and startup activities to provide a coordinated approach to project completion and eventual fuel load. The weaknesses in this regard have apparently been exacerbated by the increasingly more intense pace of work activities needed to support project completion. Licensee management attention should be especially focused on resolving these problems.

The criteria used by the NRC and the way conclusions are categorized in SALP reports show the inappropriateness of using SALP reports as an indicator of overall management prudency. The following are the criteria and categories used by SALP Boards:

CRITERIA

The following criteria were used as applicable in evaluation of each functional area:

1. Management involvement in assuring quality.

2. Approach to resolution of technical issues from a safety standpoint.

3. Responsiveness to NRC initiatives.

4. Enforcement history.

5. Reporting and analysis of 50.55(e) and Part 21 items

6. Staff (including management)

7. Training effectivenss and qualification

To provide consistent evaluation of licensee performance, attributes associated with each criterion and describing the characteristics applicable to Category 1, 2, and 3 performance were applied as discussed in NRC Manual Chapter 0516, Part II and Table 1.

The SALP Board conclusions were categorized as follows:

Category 1: Reduced NRC attention may be appropriate. Licensee management attention and involvement are agressive and oriented toward nuclear safety; licensee resources are ample and effectively used such that high level of performance with respect to operational safety or construction is being achieved.

Category 2: NRC attention should be maintained at normal levels. Licensee management attention and involvement are evident and are concerned with nuclear safety; licensee resources are adequate and are reasonably effective such that satisfactory performance with respect to operational safety or construction is being achieved.

Category 3: Both NRC and licensee attention should be increased. Licensee management attention or involvement is acceptable and considers nuclear safety, but weaknesses are evident; licensee resources appeared strained or not effectively used such that minimally satisfactory performance with respect to operational safety or construction is being achieved.

The company claims that no matter what action it had taken, there was no way that the construction time of Limerick could have been much less than it actually was.

While much of the increased cost and longer construction time of Limerick can be ascribed to changes in NRC Licensing requirements, it is not proper to assume that all increased costs and schedule delays were caused by NRC requirements.

The company has given four reasons for cost growth as presented on page 2 of PECO Exhibit No. 2:

> Cost Impact of Regulatory and Other Externally-Imposed Conditions
>
> Cost Impact of Design Changes to Facilitate Plant Operability and Reliability
>
> Cost Increases Due to Estimate Refinements and Other Causes
>
> Cost Impact of Unanticipated Escalation

Only the first of these reasons is related in any way to NRC mandated changes. When Schedule 1 of PECO Exhibit No. 2 is examined, the breakdown of regulatory and other externally-imposed conditions is seen to include an entry for non-NRC requirements and an entry for the cost impact of schedule delays due to licensing delays and other factors. In this last entry other factors include cash flow, financing constraints and the limited availability of craft manpower.

The company contends that all reasons for cost and schedule growth were due to factors beyond its control. This position is unsupported. Staff witness Hall (Stmt. WBH-1, pp. 6-7) noted that the Congressional Office of Technology Assessment has concluded that, "The regulatory process per se was not the primary source of delay in nuclear plant

construction." The study continued: "Skillful management by the utility, its contractors, and NRC is the key to avoiding delays that otherwise might result from the licensing process." When referring to NRC requirements this same study stated: "The prescriptive nature of the rules should not pose insurmountable difficulties for plant owners and designers."

Staff Statement WBH-1 at p. 7 gives a classification of causes of delay taken from an Electric Power Research Institute Study:

> In addition to regulatory causes of delay the classifications lists the following as causes of delay in construction: labor problems, equipment problems, strikes, natural disasters, nonregulatory redesign, and deliberate delay because of financial problems, changes in load growth or rescheduling of associated facilities.

PECO witness Mattson (PECO Statement 9A, pp. 26-27) expands upon this testimony and comments on the relative contributions to delay as reported in this study:

> The average nuclear unit from the case studies has experienced 43 months of construction delay -- of which 78 percent were related to out-of-scope work and 22 percent were deliberate delays.
>
> In sum, the EPRI report found that most of the delays were caused by non-utility related reasons and were in fact caused by regulatory changes and related redesign work.

The EPRI report does not show that all of the delays were caused by regulatory changes. There is even some doubt about the assertion that most of the delays were

caused by regulatory changes. The sentence folowing Dr. Mattson's excerpt is "The dominant cause of all delay was redesign and rework problems which account for 53 percent of the delays." Staff witness Hall (Tr. 3035) explained this excerpt in greater detail:

> I think we can refer back to Figure 2-5, which is on page 2-13.
>
> We see in their tree there redesign and rework, 53 percent. That is then split up into regulatory ratchet and redesign, which is 50 percent and 3 percent.
>
> If we go back, then, to the previous figure, Figure 2-3, we see that somewhere in here regulatory ratchet includes new regulation, old regulation, the direct effect of it, ripple effect of each of those; and redesign is further broken up into non-regualtory redesign and ripple effect. And I notice that there are no percentages here.
>
> So we have all these different classifications: new regulation, old regulation, non-regulatory redesign, ripple effect, all bound up into this redesign and rework of 53 percent.

Obviously non-regulatory redesign cannot be caused by the NRC. Also, the failure of a utility to meet the requirements of an old regulation is hardly the fault of any regulatory body.

It also should be noted that the 78% quoted so blithely by Dr. Mattson is subdivided into Redesign and Rework - 53% and Inability to Perform - 25%. Inability to perform includes such items as labor problems, strikes,

natural disasters, faulty installation of equipment and late delivery of equipment. None of these problems are traceable to the NRC or any other regulatory body.

Staff witness Hall (Staff Statement WBH-1, pp. 2-3) presents the argument that the issuance of more stringent standards by the NRC was a reaction to nuclear industry problems, not the cause of those problems. PECO witness Mattson (PECO Statement No. 9A, p. 21) inexplicably attempts to rebut this argument by agreeing with it.

> Q. Please address that portion of Mr. Hall's testimony about which you have comments.
>
> A. On pages 2 and 3 of Mr. Hall's testimony, the argument is made that the NRC "issued new and more stringent safety standards only when there was some showing of industry failure to meet the original safety requirements." Mr. Hall goes on to state that the shift in responsibilities for assuring safety moved from the utilities to NRC because "some utilities failed to meet minimum requirements." While it is true that some utilities did fail to meet NRC's requirements, and as a result, prompted more stringent NRC regulations, this argument does not apply to PECO.

Dr. Mattson then claims there were other reasons, besides lack of compliance by selected licensees, which prompted more stringent requirements. Among these other reasons are the Three Mile Island accident and the fire at Browns Ferry Nuclear Generating Station:

> Q. Were there other reasons that explain why NRC was issuing new and more stringent safety requirements other than the lack of compliance by selected licensees?

A. Yes, there are several other factors that had significant influence:

1. The lessons learned from the accident at Three Mile Island Unit 2 (TMI-2) stressed the negative impact of the traditional concentration on design basis events and brought attention to the need to design new regulations that addressed higher probability events. Operator training, operating experience, emergency planning, control room design, improved instrumentation, and technical support were areas in which NRC had not placed sufficient emphasis before the accident at TMI-2.

2. Even before the TMI-2 accident, NRC regulations had started to become more prescriptive. The state of knowledge regarding reactor safety was undergoing rapid changes in an industry that was still relatively young. Analytical tools, which were developed as a result of large-scale computerization, raised technical concerns that had never been considered before because they were beyond the state of the art.

3. The fire at the Brown's Ferry plant in 1975, which disabled much of the plant's safety equipment, and other plant operating experiences also provided new technical information about safety systems that prompted new and more stringent NRC regulations.

Dr. Mattson has cited the increase in NRC publications and the increase in NRC staffing as further evidence of the NRC being "out of control" and causing increasing costs and construction time. (PECO Statement No. 9, p. 38, p. 43, Schedule 6, Schedule 7, Schedule 8). This evidence shows correlation but does not show causality. Unofficial sources of licensing requirements have also been referenced by Dr. Mattson as NRC imposed causes of delay.

Q. Previously, you mentioned that the NRC also used industry standards as licensing requirement. What role does the NRC have in the development and growth of industry standards?

A. The role of NRC in developing industry standards is at two levels, management and technical staff. Senior management participates in the process by serving on the various committees of the American National Standards Institute (ANSI) that design and manage the overall body of nuclear standards. Mid-level managers serve on committees of the various engineering societies responsible for producing nuclear standards. Such societies include the Institute of Electrical and Electronics Engineers, American Society of Mechanical Engineers, American Society of Testing and Materials, American Nuclear Society, and about a dozen others. (PECO Statement No. 9, p. 24).

Electric utilities also are directly involved in developing industry standards as illustrated by Staff Statement WBH-1, p. 5:

Q. Are electric utilities represented in the groups which developed industry standards?

A. Yes. The electric utilities are heavily represented. The involvement of PECO engineers in these groups provide some examples: John Kemper is a member of the Standards Steering Committee of the American Nuclear Society (PECO Statement No. 2, Schedule 1). David Helwig has served on and is now chairman of the committee on Nuclear Air and Gas Treatment, The American Society of Mechanical Engineers (PECO Statement No. 5, Schedule 1). Edward Sproat is active in developing standards developed by The Institute of Electrical and Electronic Engineers. He states, "I am also active in the nuclear standards writing activities of the IEEE." (PECO Statement 6, page 5, line 5). Vincent Boyer was a past president and Director of the American Nuclear Society (PECO Statement No. 1, page 2, line 11).

As discussed supra, there are costs associated with delaying a construction project. PECO claims $385,100,000 in direct cost increases due to schedule delays and other factors. (PECO Exhibit No. 2, page 2A). The company expands upon this cost impact of schedule extensions at page 17 of PECO Exhibit No. 2:

> 15. COST IMPACT OF SCHEDULE EXTENSIONS DUE TO LICENSING DELAYS AND OTHER FACTORS — $385.1 Million
>
> Delays in the construction and operating schedules resulted in time related direct cost increases due to the prolonged period of equipment maintenance and project staffing. Schedule extensions were experienced as a result of:
>
> - Delays in receipt of a Construction Permit from the NRC;
> - Cash flow and financing constraints;
> - Limited availability of craft manpower;
> - Delays in receipt of the low power operating license from the NRC;
> - The cumulative effects of regulatory change on project engineering and construction;
> - Delays in receipt of the full power operating license from the NRC.

Even after making this claim the company asserts that its own delay decisions had no appreciable effect upon construction cost.

A study cited by Staff witness Hall indicated that delays increase cost by at least $100 million per year. (Staff Statement WHB-1, pp. 7-8):

Q. Are construction leadtimes and delays related to the costs of construction projects?

A. Yes. The previously cited EPRI study on p. 1-15 states:

> This study focuses on leadtimes and schedule delays rather than costs and cost overruns. However, leadtimes and costs are intrinsically related, and a study of cost overruns cannot be performed without first understanding schedule delays. For projects with long leadtimes, especially nuclear plants, up to 70% of the capital costs are time related -- escalation and interest during construction.
>
> Given the magnitude of time related costs one way to control costs and cash flow is to control leadtimes. In fact, for some projects, a decrease in construction duration of one year could save at least 100 million dollars in time related charges.

Therefore, as discussed above, Staff respectfully submits that PECO's attempt to blame the NRC for the delay in completing Limerick and the resulting cost overrun is without merit.

b. The testimony presented by PECO's TB&A witnesses should be given no probative weight

PECO presented testimony from various employees[21] of Theodore Barry & Associates ("TB&A") which purported to

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21/ Messrs. Madden, Osborn, Kononetz and Love.

be an "independent assessment of the prudence and reasonableness of Limerick 1 and common plant management" (PECO Stmts. 8 and 8A). In addition, two of these witnesses sponsored additional rebuttal and surrebuttal testimony alleging errors in the Staff and OCA proposals (Stmts. 8B and 8C). Staff respectfully, submits that TB&A's testimony has been shown to be meritless and therefore should be given no probative weight in this proceeding for the following reasons.

First, their "restrospective analysis" is inappropriate and irrelevant in light of the Commission's rejection of similar testimony in the Beaver Valley proceeding. See the discussion supra in Section C(2)(c). If the Commission determines that a hypothetical approach should be employed in this case, then the critical path analysis presented by OCA's experts is appropriate rather than TB&A's retroactive review.

In addition, the "independence" of these witnesses' analysis is seriously in doubt. The fact is that TB&A's appearance in this proceeding was bought by PECO for a fee of almost $2,000,000 (Staff Exh. 23). They appeared solely on PECO's behalf, and in fact solicited PECO's business

(Tr. 5184-85). PECO made the decision - without consulting any other party or the Commission-to retain the firm (Tr. 5186). Obviously, TB&A's role in this case is exactly the same as that of any other expert witness. As such, the testimony sponsored by the TB&A employees is subject to the same scrutiny as any other testimony adduced in the instant proceeding.

The role of witnesses in litigated proceedings is obvious. A witness's ultimate obligation is to tell the truth, the complete truth, as he or she perceives it. This requires a witness to answer truthfully even those questions which might hurt the cause of the client who retained that witness. See for example, EC 7-28,[22/] which discusses a lawyer's duty to the adversary system of justice and provides that witnesses should always testify truthfully and should be free from any financial inducements that might tempt them to do otherwise. In other words, a witness (beyond an expert witness's "reasonable fee") should have no financial or other stake in the proceeding that might affect his or her testimony. If a witness does have such an interest, then clearly he or she would be subject to a charge of bias.

Staff, of course, is not questioning the ethics of the TB&A witnesses. It is important, however, to make sure that the TB&A analysis does not escape the scrutiny appropriate to any witness's testimony.

22/ Code of Professional responsibility, adopted by the Pennsylvania Supreme Court in 1974.

Had PECO wished to present a truly non-partisan, objective analysis, it could have employed the procedure used in the ECR #8 investigation. There, while the experts from Temple, Barker and Sloane, Inc. appeared on Staff's behalf, PECO had input into their selection and was provided an opportunity to review and comment upon TBS's draft reports. PECO, of course, had the right not to follow that procedure in this proceeding, and instead retain its experts in the usual fashion. But it does mean, however, that the TB&A witnesses were just as partisan and adversarial as the other witnesses who appeared.

The third reason why the testimony of the TB&A witnesses should be given little probative weight in this proceeding is their admitted ignorance of the prudency standard developed and applied by this Commission. Although a substantial portion of Stmt. 8 (pp. 10-13) and Stmt. 8B (pp. 2) is devoted to the standard of review to be used, and how Staff failed to adhere to that standard, it is interesting to note that on cross-examination, Mr. Madden agreed that he had reviewed only "some" of the record adduced in the Limerick I investigation (Tr. 1211), nor had he reviewed any determination (other than "portions" of the Limerick 1 decision) with respect to the standard of review for prudency decisions (Tr. 1213). Indeed, for TB&A to lecture Staff for "misinterpreting" the Commission's Limerick 1 order is presumptuous, in light of Staff witnesses Rosenthal and Dougherty's vast experience in preparing, interpreting and implementing <u>this</u> Commission's

orders. (PECO Stmt. 8B, pp. 1-2). Had these outside experts taken more time to obtain and examine at least several of the Commission's prudency determinations[23/], they might be able to more accurately state the appropriate standard in this jurisdiction. See, Section V-B of this Brief.

Finally, the Commission should place little weight on TB&A's testimony because it simply is lacking in merit. For example, it was clearly brought out on cross-examination how cursory the development of Section V of Stmt. 8 was. The TB&A witness agreed that in their evaluation of the reasonableness of PECO's delay decisions, they never even considered the increase in rates that would result from PECO's decisions, but only looked at "reasonable management control" (Tr. 1218). The Major Event Time-Line on p. 18a of Stmt. 8 shows the omission of Con Ed's dividend, but fails to show the infusions of capital received by PECO as a result of rate increases during that time (Tr. 1223). TBA's discussion of activities makes little or no mention of expenditures throughout 1974-80 associated with Limerick 2, Salem 1 or Salem 2 (Tr. 1223-24). The TB&A witnesses presented an analysis which purported to demonstrate the lower appeal of utilities as a potential investment compared to the S&P 500 based on the declining returns on equity (Stmt. 8, p. 263, Schedule 37; Tr. 1226). Yet, despite

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23/ Such as the ECR #8 order, both Susquehanna decisions, or the Beaver Valley decision.

their own admission that a primary reason for the declining utility returns was the increasingly large construction budgets, these witnesses did not examine the capital budgets of the S&P 500 (Tr. 1226). Nor were they able to answer questions relating to the accrual of AFUDC by non-utilities, despite their recognition that the accounting treatment of carrying charges provides "motivation" to complete construction projects (Tr. 1227-28). In addition, the witness (Madden) was unable to answer - although he later did so - a question as to how the market would view non-regulated companies which engaged in unnecessary construction projects (Tr. 1228-29). The witness also agreed that when major project CWIP is not allowed in rate base, it becomes very difficult for a utility to earn its allowed rate of return when a large portion of its plant is comprised of CWIP (Tr. 1229).

Another part of TB&A's financial analyses was a depiction of base rate increases (Stmt. 8, p. 263B, Schedule 38, Tr. 1230). It became clear on cross-examination that this analysis was probative of nothing. First it was not PECO-specific (Tr. 1230). Second, it does not take into account the extent to which the utilities' requested base rate increases were inflated or unjustified (Tr. 1230-31). No examination was made as to the rate filings themselves (Tr. 1231), nor was any attempt made to determine the adequacy or propriety of the Commission allowances (Tr. 1231-33). In point of fact, during the period under discussion, TB&A made no specific

examination of the rate increases requested by PECO, the frequency of such filings on the amounts ultimately granted by the Commission (Tr. 1235), even though rate increases were granted seven times from 1975-1983.

In their financial analysis, the TB&A witnesses discussed the fact that during the period of review (1970's & early 1980's), the market to book ratio dropped below 1 (Stmt. 8, p. 264, Tr. 1242). Staff submits that this observation is meaningless, because the TB&A witnesses admitted they did no comparison with other utilities (Tr. 1242). In addition, TB&A compared PECO to a group of utilities on the basis of selected financial criteria (Tr. 1242). Yet, that group included companies which were not involved in nuclear construction (Tr. 1242), as well as companies with AA or AAA bond ratings (Tr. 1243). Even more strangely, the responsible witness was unable to state whether any of those 89 utilities had cancelled plants or second units (Tr. 1243) despite the effect that such action would have on their financial condition. (Tr. 1244).

When examining the financial condition of PECO, TB&A made no evaluation of the consequences of cancelling Limerick 2 (Tr. 1246). Nor did it examine how companies in its analysis were able to continue their nuclear construction program in terms of financing options (Tr. 1249). Also, TB&A did no analysis of possible financing had PECO not made the decision in 1976 to delay construction (Tr. 1250).

As the above discussion demonstrates, the review and analysis performed by TB&A completely lacked a credible foundation, and was totally without merit. Staff respectfully submits that this is but one example of the inadequate review conducted by TB&A. Another example of the inadequate job done by TB&A is its witnesses' unhesitating criticism of Staff's "misinterpretation" of the Commission's Limerick #1 order when the lead TB&A witness had not even read the entire order (Tr. 5190). Also, TB&A had no qualms about responding to criticism of PECO witness Hill's revenue requirement analysis despite their own disclaimer that, "it should be emphasized however, that TB&A has not sufficiently reviewed and is not generally endorsing PECO witness Hill's analysis, other than to the specific extent that it employs actual or currently-estimated data as the basis of quantification as described above." (Stmt. 8B, p. 7).

In its zeal to advance its clients' interests, TB&A engaged in unnecessary analysis and testimony. For example, there is a discussion in Stmt. 8B about the reasonableness of the excess costs associated with the Schneider Sheet Metal, Inc. subcontract (pp. 7-8). Frankly, the only purpose Staff can see for that item of testimony was to increase TB&A's fee. It was presented in response to the testimony of Staff witness Rosenthal in which he mentioned that subcontract only to point out that Staff made no analysis of excess costs other than those associated with the imprudent 1976 and 1978 delays (Stmt. RAR-2, p. 3).

Staff submits that the lack of merit in TB&A's analysis is obvious by its witnesses' repeated refusal to recognize the Commission's imprudency findings. From the testimony and answers on cross-examination of the TB&A witnesses, it became obvious that TB&A simply is unable to understand exactly what the Commission's imprudency finding means.

BY MS. CHESTNUT:

Q. Mr. Love, I would like to refer you to PECO Statement No. 8B, specifically page 3. Beginning on line 7 of that page, you discuss what you refer to as assumptions which underlie Staff adjustments, and you use the sentence, "It appears they would have the Commission accept the following scenario." Do you see the reference?

A. Yes, I do.

Q. And the first one that you list is that "PECO's announcements to defer construction in 1976 and 1978 have been determined to be imprudent."

Are you aware, Mr. Love, that the Commission has already made that determination?

A. What I am aware of is that the Commission has made a determination only in the sense that it has been accepted for the purposes of this proceeding that there has been some imprudence.

What I am also aware of is that, as I have mentioned several times in my direct and rebuttal testimony, that there has been no determination of what the specifics of that imprudence

are, which is a difficulty I have in understanding it or understanding whether the ruling was meant to be a ruling of imprudence.

So, to that extent, that is what my awareness consists of.

Q. Mr. Love, are you aware that the Commission made the statement in its Limerick No. 1 order, "Considering the foregoing, we are of the opinion that PECO management did not exercise judgment sufficient to meet a reasonable man standard in delaying construction of Limerick in 1976 and 1978"?

A. Yes.

Q. And is it your opinion, Mr. Love, that that is not a definite finding of imprudence?

A. Yes. It is not specific, in my opinion.

Tr. 5180-81.

This arrogant and unrealistic approach, while commendable in terms of its allegiance to its clients, renders TB&A's entire appearance in this proceeding subject to doubt.

It was this zealousness in Staff's opinion, that lead to the unwarranted and venomous personal attack on the integrity of the OCA's lead Limerick witnesses. This lapse of judgment on the part of TB&A must be considered by the Commission in determining what weight, if any, to give to the testimony.

Therefore, for the reasons stated above, Staff respectfully submits that the testimony presented by the TB&A

witnesses on behalf of its client PECO is flawed, irrelevant and unworthy of consideration by the Commission.

c. The testimony of PECO witnesses Hieronymus and Perl does not reduce the Company's liability.

As it did in the Re Limerick Nuclear Generating Investigation at I-80100034, 56 Pa.P.U.C. 47 (1982), and the Limerick Unit No. 2 Nuclear Generating Station Investigation at I-840381 (1985), the Company has again sponsored the testimony of Dr. William H. Hieronymus (PECO Sts. 15, 15A, 15B) and Dr. Lewis J. Perl (PECO Sts. 11, 11A, 11B). Although Dr. Hieronymus and Perl offer a wide range of opinions on many topics in their testimonies, the central thread of their testimonies is to offer statistical analysis purporting to demonstrate the economics and reasonable construction time and expense of Limerick Unit 1. The Staff respectfully submits that when closely examined the methodologies sponsored by these witnesses are so seriously flawed as to make their testimony of little practical value.

Initially, it should be noted that the statistical comparison type of evidence sponsored by Drs. Perl and Hieronymus has traditionally been viewed with skepticism by the Commission. In its order in Pennsylvania Public Utility Commission v. Philadelphia Electric Company, 52 Pa. P.U.C. 772 (R.I.D. 438, 1978), the Commission commented on the utility of nuclear power plant surveys when examining construction prudency issues:

> In our view, the evidence presented by TB&A shows a lack of prudent management in connection with the construction of Salem No. 1. Philadelphia Electric Company offered no testimony through PSE&G to rebut TB&A's findings. Instead, in defense, PECO offered evidence of a comparison of the Salem No. 1 per kilowatt cost to other nuclear projects in Northeast United States, as proof that the overall installed costs per kilowatt generated by Salem No. 1 were within the range of other comparable plants. Theodore Barry & Associates admits that such comparison shows that Salem No. 1 costs are in line with other Northeast plants, but avers that such comparison does not provide the best evidence of the appropriate and proper cost for Salem No. 1. While such comparable evidence submitted by the company has some probative value, it is not sufficient weight to override the TB&A evidence. Such comparisons do not reflect the unique costs of environment protection, labor, and other variable aspects in building a particular nuclear plant.

52 Pa.P.U.C. at 787 (emphasis added).

Interestingly, both Dr. Hieronymus (PECO St. 11, p. 58) and Dr. Perl (Tr. p. 879-881) admitted that such comparisons do not in themselves establish a particular utility's prudency or imprudency.

It must also be noted that analysis similar to those sponsored by witnesses Perl and Hieronymus in this proceeding were reviewed and found unpersuasive by Administrative Law Judge Turner in her Recommended Decision (R.D.) in the Limerick Unit No. 2 Nuclear Generating Station Investigation, I-840381 (issued July 12, 1985). In her Recommended Decision, Judge Turner rejected an analysis

sponsored by Dr. Perl supporting Limerick 2's cost and completion schedule (R.D. p.238); an analysis by Drs. Perl and Hieronymus on projected nuclear operation and maintenance costs (R.D. p. 246); and predictions by Drs. Perl and Hieronymus on Limerick 2 post commercial operation capital additions (R.D. p. 252). Most tellingly, Judge Turner found that an analysis sponsored by Drs. Perl and Wile, when corrected for methodological errors, supported a conclusion that completion of Limerick Unit No. 2 was uneconomical (R.D. p. 260-4). Judge Turner also found unpersuasive a projection of coal costs sponsored by Dr. Perl (R.D. p. 281-4). The Staff respectfully submits that the comparisons and conclusions sponsored by Drs. Perl and Hieronymus in this proceeding suffer from the same limitations and should be likewise disregarded.

1. Dr. Hieronymus uses questionable statistical techniques to determine the reasonableness of PECO's construction schedule.

Dr. Hieronymus used multiple regression analysis to determine how close Limerick 1's construction schedule was to the industry average. His conclusion was that on an adjusted basis "Limerick was completed slightly more rapidly than would be anticipated." (PECO St. 15, p. 62). An examination of the statistics related to the regression equation and a review of Dr. Hieronymus' testimony under cross-examination raise serious questions about the validity of these results.

Dr. Hieronymus used a regression analysis to develop predictions in plant schedules based on plant characteristics. (PECO St. 15, p. 59). A statistical technique called step-wise regression was used to pick plant characteristics for which the relationship was statistically meaningful. (PECO St. 15, p. 61). When asked on cross-examination about the possible flaws in using such a selection technique, the witness responded it could yield illogical results which should be evaluated themselves.

> Q. I understand your prior response was that the results that are produced by the kind of analysis you define should themselves be evaluated for reasonableness.
>
> A. Yes, I think so; although, for the purposes that I've done this analysis here, I don't think it is terribly important.
>
> If I can, I'll explain the distinction. If I'm going to use an equation to predict something, if I'm using statistics in a forecasting sense, then I think it's very important that the relationships in the equation be sensible and accord with one's belief about reasonable relationships.
>
> If what I'm doing is an exercise in descriptive statistics, which is what this is -- I'm not trying to predict anything in the literal sense; I'm simply trying to describe differences in the schedule of plants as they vary with characteristics -- then I think it's a good deal less important.

(Tr. p. 701, emphasis added).

It is submitted that Dr. Hieronymus' failure to use personal judgment in selecting independent variables for his regressions makes his conclusions fatally suspect.

The obvious flaw in the regression analyses sponsored by Dr. Hieronymus is his failure to remove independent variables even though they are illogical. An example of this is contained in the schedule regression analysis demonstrated in Exhibits WHH-3 and WHH-5 (PECO St. 15, Exhibits WHH-3, WHH-5). In Exhibit WHH-3, he found a negative coefficient for the variable WTHRDPR (mean days of annual precipitation). The negative value suggests that the more it rains, the less expensive it is to build a nuclear plant (Tr. 702-3). In Exhibit WHH-5, this same variable had a positive coefficient as one would expect, but a related weather variable WTHRSNOW (mean annual snowfall in inches) was negative. This suggests that the more it snows, the faster a plant can be completed. However, the annual precipitation variable in the same equation shows that the greater the precipitation, the longer to complete the plant. Regardless of whether greater snow and precipitation increase or decrease construction schedules, both coefficients should have the same sign. Indeed on cross-examination, Dr. Hieronymus admitted some of his independent variables were probably spurious (Tr. p. 703, lines 3, 20).

Witness Hieronymus' reluctance to eliminate conflicting variables and use some judgment in the selection of variables coupled with the illogical coefficient signs raises significant questions concerning the utility and viability of the regression equations used in Exhibits WHH-3 and WHH-5 to assess Limerick 1's construction schedule

as related to the schedule of other units. During cross-examination, Dr. Hieronymus admitted that the principal flaw of his variable selection technique was that it was "mindless." He explained "[i]f you let the computer, which is very stupid, do the selection for you, it may select some things that, at least in my opinion, may not make any sense" (Tr. p. 700). The utility of his model is further weakened by the admission that ". . . the whole second analysis is somewhat infected by the inclusion of Diablo Canyon in the sample. . ." (Tr. p. 703, line 20-22). Even Dr. Hieronymus has admitted problems with his regression model. Based on the previously listed deficiencies of his model (spurious variables and inconsistent coefficients) and its shortcomings as admitted in the cross-examination, Dr. Hieronymus' construction schedule models cannot be used in this proceeding for meaningful analysis or comparison.

2. Dr. Perl's testimony does not absolve the Company of liability for its imprudence.

Dr. Lewis J. Perl addressed the reasonableness of Limerick I's construction cost and schedule by also sponsoring a comparison with other nuclear units (PECO St. 11). It is submitted that Dr. Perl's testimony is rendered worthless by virtue of his prior inconsistencies in past testimonies, inconsistencies in his present testimony and statistical flaws in his present analysis.

Dr. Perl has testified on similar issues many times before several regulatory commissions, including this one. (See pages 3-6 of Dr. Perl's vita attached to PECO St. 11). The positions taken in these proceedings, however, have not always been consistent. In the Limerick Unit No. 2 Investigation at I-840381, Dr. Perl testified concerning an analysis he had prepared on the reasonableness of the estimates of Limerick 2's completion costs. In her Recommended Decision (R.D.), ALJ Turner summarized the evidence presented concerning the consistency of Dr. Perl's testimonies from case to case.

> OCA has further stressed that Dr. Perl's testimony in this proceeding regarding Limerick 2's capital costs is different than his testimony in the last proceeding on this case, and in other proceedings on other nuclear plants in that he has not done his own analysis of capital costs here. For instance, at I-80100341, while PECO's Forecast 5 projected a cost of $4.2 billion for the whole project, Dr. Perl developed an estimate of $4.75 billion (R.D. at 82). Moreover, Dr. Perl testified on cross-examination on this record that he has testified in proceedings such as this 15 or 16 times in the last 10 years and in all but 2 or 3 of these cases he has developed an independent capital cost estimate (Tr. 1253-1254). Recently Dr. Perl testified in main [sic] regarding the expected capital costs of Seabrook Units 1 and 2 (the gap in completion date assumed by Dr. Perl there for the two units was three years, as compared to Limerick's gap of five years). This testimony was given just four months prior to the filing of his direct testimony in this case. When questioned about the application of his method of capital costs analysis as

> used for Seabrook, and its application to Limerick 2, Dr. Perl conceded that if he had performed the identical analysis on the Limerick plant as he did on the Seabrook plants he would have concluded that Limerick 2 is uneconomic. Dr. Perl did state that he now felt that his main [sic] testimony was inaccurate, conservative, and that he had projected the cost for Seabrook 2 as being too high. (OCA Exh. 53, 54; Tr. 1263-66; Tr. 1354-55).

R.D. at 225-6 (emphasis added).

ALJ Turner ultimately rejected the Company's position on this issue (R.D. p. 228). It is worth repeating at this point that the analysis sponsored by Dr. Perl in that proceeding, when corrected for methodological errors, was found by Judge Turner to support a conclusion that Limerick 2 was uneconomic (R.D. p. 260-4).

In the present case, Dr. Perl has sponsored testimony that states based on information available in 1976-78, the Limerick construction delays had no significant impact on consumer costs (PECO St. 11, p. 23-4). When asked on cross-examination by the Consumer Advocate whether he had previously testified before this Commission on the cost of delaying Limerick 1, Dr. Perl responded he had not (Tr. p. 852, lines 15-19). Dr. Perl's recollection on this point was refreshed, however, by the introduction of OCA Exhibit 44 which was a portion of his testimony in the Limerick I Investigation at I-80100341 where Dr. Perl testified that delays in Limerick construction will increase overall cost and decrease economy and savings from the unit. To similar

effect is a portion of Dr. Perl's rebuttal testimony in Pennsylvania Public Utility Commission v. Philadelphia Electric Company, docket R- 811626 (1982), admitted in this proceeding as OCA Exhibit 45, where Dr. Perl testified that the estimated effect on revenue requirements of a 6 month slippage in Limerick construction had a present value of $274 million. These past inconsistencies on a central issue in the present testimony cut to the heart of Dr. Perl's credibility. Coupled with the inconsistencies in the present testimony, and the statistical errors in his analysis, Dr. Perl's testimony in this proceeding is rendered worthless.

(a) Limerick 1's construction costs when compared to other units are significantly above the average.

The reasonableness of Limerick 1's construction costs by comparison with other nuclear units was addressed by Dr. Perl (PECO St. No. 11). In part, the purpose of this testimony was to:

> evaluate the reasonableness of Limerick 1's construction costs and schedule by comparison with other nuclear units. . . .

(PECO St. No. 11, p. 3)

Dr. Perl developed a regression equation to examine the reasonableness of Limerick 1's construction costs with other nuclear units. His analysis used two approaches: 1) he compared Limerick's actual cost to predicted cost, and 2) he

compared Limerick's actual cost to an average standardized cost (Id., pages 5-8).

Dr. Perl's comparison of construction costs is set forth in "Limerick Interrogation Set XXIII Correction to Addendum to Testimony of Lewis J. Perl", which was admitted as OCA Ex. 79. The results show Limerick's 1 actual cost is 4.2% higher than the predicted cost and 2.8% higher than the average standardized cost. When ranked from least to most costly, Limerick 1 ranks 24th out of 37, almost two-thirds of the way down the list.

The Staff submits that Limerick may be even further from the average and could be ranked even closer to the most expensive unit. In addition, there is some question on the reliability of Dr. Perl's testimony due to inconsistencies in analysis and lax use of statistical tools. After noting Dr. Perl's continuous changing of his testimony and the model used to analyze the data, the impression is given that statistical manipulations are being used to reach a pre-determined result. The following are some of the problems noted in Dr. Perl's testimony:

i. Mathematical Errors

While it is not uncommon to make computational errors, Dr. Perl's testimony seemed to contain an inordinate amount. See the several errata sheets, the Appendium and Corrections to Testimony (OCA Ex. 79).

ii. Questionable Statistical Practices

Dr. Perl used a nonsignificant independent variable ("Cooling Tower Indicator") in his original testimony (PECO St. 11, page 3 of Schedule 1). When questioned in IR-OCA-2-8 (admitted as Staff Ex. 33) about using the variable, he still insisted it should be used. This contradicts with generally agreed upon statistical practices. Finally, in IR-OCA-16-7 (admitted as Staff Ex. 32) he agreed that it was preferable to take it out.

Dr. Perl did not develop a correlation table between his independent variables before including them in his regression equation (Tr. p. 888). This offers potential for error in the model, in that, if two or more variables are highly correlated, the regression equation may statistically be shown to be good, when it may not be a good predictor of the dependent variable.

iii. Conflicting Statements

After the Consumer Advocate asked Dr. Perl to redo his analysis excluding the non-significant variable "Cooling Tower Indicator" (see IR-OCA-16-2, admitted as Staff Ex. 31), Dr. Perl filed an Addendum to his testimony stating in part:

> Since filing the testimony, new data on the construction costs of other nuclear units has become available.

(Addendum, page 1, lines 1-3.)

> I should note that in addition to updating the data, in my new comparison I have added a variable to the regression equation. This variable distinguishes between units with construction permits issued in 1972 or 1973 or in later years. This variable was added because the data now clearly indicates that units with post-1973 CP dates have higher costs.

(Addendum, page 2, lines 4-9.)

In Dr. Perl's original testimony (PECO St. 11, page 5, line 23 to page 6, line 1), he emphasized why post 1971 was the appropriate period to use as a data base. He re-affirmed this assertion in IR-LIM-STAFF-07 (admitted as Staff Ex. 24) when asked what criteria was used for selecting the units in the database. He answered:

> The criteria used in selection were:
>
> 1. Construction permit date issued in 1972 or later;
>
> 2. Single unit or first unit of multi-unit plant; and
>
> 3. Availability of data.
>
> The basis for criterion one is that (1) empirically over the entire database there was a marked increase in nuclear capital costs for units with a construction permit date in 1972 or later vis-a-vis units with a construction permit date prior to 1972; (2) regressions run splitting the database at this date indicate much different coefficients; and (3) a study by EPRI argues that regulatory climate changed markedly since 1972.

Staff Ex. 24.

Analysis of "old" and "new" direct construction cost data submitted in IR-LIM-STAFF-18 (admitted as Staff Ex. 25) shows that even though units with later construction permits have higher costs in the original and revised direct cost data, there was no shift between the two sets of data for the period 1972 and 1973 permitted units and those after 1973. Tables 1 and 2 included in this argument show just the contrary. In the original cost database, the ratio of 1974 and later units to 1972-73 units was 83.66% and the ratio for the revised database was 83.90%. This indicates, if anything, the revised data for the years 1972-73 moved closer to post 1973 units. Table 1 also illustrates this point. Under the "Net Change/Unit" column the cost for units in the period 1972-73 ($25.75/kw) increased faster than post 1973 units ($24.76/kw), a 4% greater increase for the 1972-73 time period than post 1973. This analysis clearly contradicts Dr. Perl's assertion that the "new" data shows a difference between the 1972-73 period and post 1973. The relationship was virtually the same for both sets of data.

In response to IR-OCA-2-10 (admitted as Staff Ex. 36), Dr. Perl notes he has testified seven times between 1983-85 using the technique used in this testimony to adjust for construction costs and never used the variable "Construction Permit Issued 1972-73." As was shown above, these previous testimonies used databases similar to the one used to compare Limerick 1's construction costs.

TABLES 1 and 2 TO ANALYSIS OF DR. PERL'S STUDIES

PERL'S ORIGINAL VS. REVISED COST DATA(1984$/KW)

UNIT NAME	CPD	ORIGINAL DIRECT COST DATA	REVISED DIRECT COST DATA	DIFF. BETWEEN REV. - ORIG.
FARLEY 1	72.62	1376	1376	0
FARLEY 2	72.62	1249	1249	0
FERMI 2	72.71	3027	3076	49
MIDLAND 1	72.96	2874	2874	0
MIDLAND 2	72.96	2034	2034	0
HATCH 2	72.96	952	952	0
ARKANSAS ONE 2	72.96	922	922	0
WATTS BAR 1	73.04	1655	1655	0
WATTS BAR 2	73.04	1239	1239	0
MCGUIRE 1	73.13	935	935	0
MCGUIRE 2	73.13	798	857	59
WPPSS2	73.2	3029	3029	0
SUMMER	73.2	1557	1557	0
SHOREHAM	73.29	4102	4378	276
LASALLE 1	73.71	1636	1636	0
LASALLE 2	73.71	1033	1020	-13
SAN ONOFRE 2	73.79	2454	2454	0
SAN ONOFRE 3	73.79	1589	1589	0
SUSQUEHANNA 1	73.87	2091	2184	93
SUSQUEHANNA 2	73.87	1313	1364	51
BEAVER VALLEY 2	74.37	3356	3457	101
NINE MILE PT. 2	74.45	3583	3804	221
LIMERICK 2	74.45	1885	1774	-111
VOGTLE 1	74.45	2903	3467	564
VOGTLE 2	74.45	1962	2363	401
MILLSTONE 3	74.62	2714	2714	0
GRAND GULF 1	74.71	2100	2155	55
GRAND GULF 2	74.71	1850	1642	-208
HOPECREEK	74.87	3215	3254	39
WATERFORD 3	74.87	2524	2524	0
COMMANCHE 1	74.96	3306	3306	0
COMMANCHE 2	74.96	1321	1321	0
BELLAFONTE 1	74.96	1772	1772	0
BELLAFONTE 2	74.96	1347	1347	0
CATAWBA 1	75.62	1700	1700	0
CATAWBA 2	75.62	1108	1108	0
BRAIDWOOD 1	75.96	1632	1632	0
BRAIDWOOD 2	75.96	1099	1099	0
BYRON 1	75.96	1908	1899	-9
BYRON 2	75.96	1223	1223	0
SOUTH TEXAS 1	75.96	3260	3260	0
SOUTH TEXAS 2	75.96	1638	1638	0
CLINTON 1	76.13	3072	3071	-1
CALLAWAY	76.29	2062	2062	0
PALO VERDE 1	76.37	2103	2103	0
PALO VERDE 2	76.37	1725	1725	0

PERL'S COST DATA (CONTINUED)

PALO VERDE 3	76.37	1729	1729	0
SEABROOK 1	76.54	2924	2754	-170
SEABROOK 2	76.54	2155	2155	0
RIVERBEND	77.2	3424	3424	0
PERRY 1	77.37	2119	2119	0
PERRY 2	77.37	1335	1335	0
ST. LUCIE 2	77.37	1747	1778	31
WOLF CREEK	77.37	1992	2020	28
HARRIS 1	78.04	2865	2865	0
HARRIS 2	78.04	1391	1391	0
MARBLE HILL 1	78.29	2157	2157	0
MARBLE HILL 2	78.29	1244	1244	0

				CHG./UNIT
AVG. 72-73	1793.25	1819.00	515	25.75
AVG. 74+	2143.42	2168.18	941	24.76
AVG. ALL YRS.	2022.67	2047.78	1456	25.10

TABLE 2

PERCENT 1972-73 PERIOD TO POST 1973 PERIOD

TIME PERIOD	ORIGINAL TESTIMONY	REVISED TESTIMONY	PERCENT CHANGE
1974+	83.66	83.90	0.29
ALL YEARS	88.66	88.83	0.19

iv. Conclusion

The number of adjustments Dr. Perl made and the change of the regression model suggests Dr. Perl was using statistics to reach a pre-determined result. This is evident by examining the chronology of his different updates as they relate to various interrogatories. On page 2 of Schedule 1 of PECO St. 11, Dr. Perl shows Limerick 1 ranked approximately in the middle. When the non-significant "Cooling Tower" variable was eliminated, Limerick 1 became more expensive than in the original testimony, when compared to the average standardized cost or the predicted cost (see IR-OCA-16-2, admitted as Staff Ex. 31).

Shortly after filing that interrogatory, Dr. Perl filed an Addendum to his original testimony stating, "Since filing the testimony, new data on the construction costs of other nuclear units has become available. Since these new data have some effect on the results, I am filing the addendum to update the comparison included in my testimony." (See Addendum to Statement No. 11, p. 1, lines 4-6). Dr. Perl then introduced a new independent variable called "Construction Permit Received in 1972-73 indicator" (See Addendum, Schedule 20, page 3). He states "[t]his variable was added because the data now clearly indicates that units with post-1973 CP dates have higher costs." (See Addendum, p. 2, lines 7-9). As shown in Tables 1 and 2 in a previous section above, the revised cost data base does not demonstrate those

higher costs any more than the original cost database did. Of course with the new variable added, Dr. Perl was able to move Limerick 1 back to the middle of the ranking again (See Addendum, Schedule 20, page 2). It appears that Dr. Perl then filed corrections to the Addendum because of previous errors he made. The correction moved Limerick 1 to a slightly less favorable ranking than in the original Addendum (see "Limerick Interrogatories Set XXIII Corrections to Addendum to Testimony of Lewis J. Perl", OCA Ex. 79, schedule on page 2). Also, Limerick 1's actual cost was 4.2% greater than the predicted and 2.8% greater than the average standardized cost (see OCA Ex. 79, p. 1, lines 9-12).

Dr. Perl indicated in IR-OCA-23-4 admitted as Staff Ex. 28) that removing the new independent variable "Construction Permit Received in 1972-73 Indicator" resulted in Limerick 1's cost being 9.2% greater than the predicted and 7.2% greater than the average standardized cost (see Staff Ex. 28, page 1, lines 14-18). Limerick 1's ranking, when excluding this variable, was the 25th most expensive out of a possible 38 plants. Over 66% of the plants, when adjusted for Limerick 1's characters, were less expensive to build.

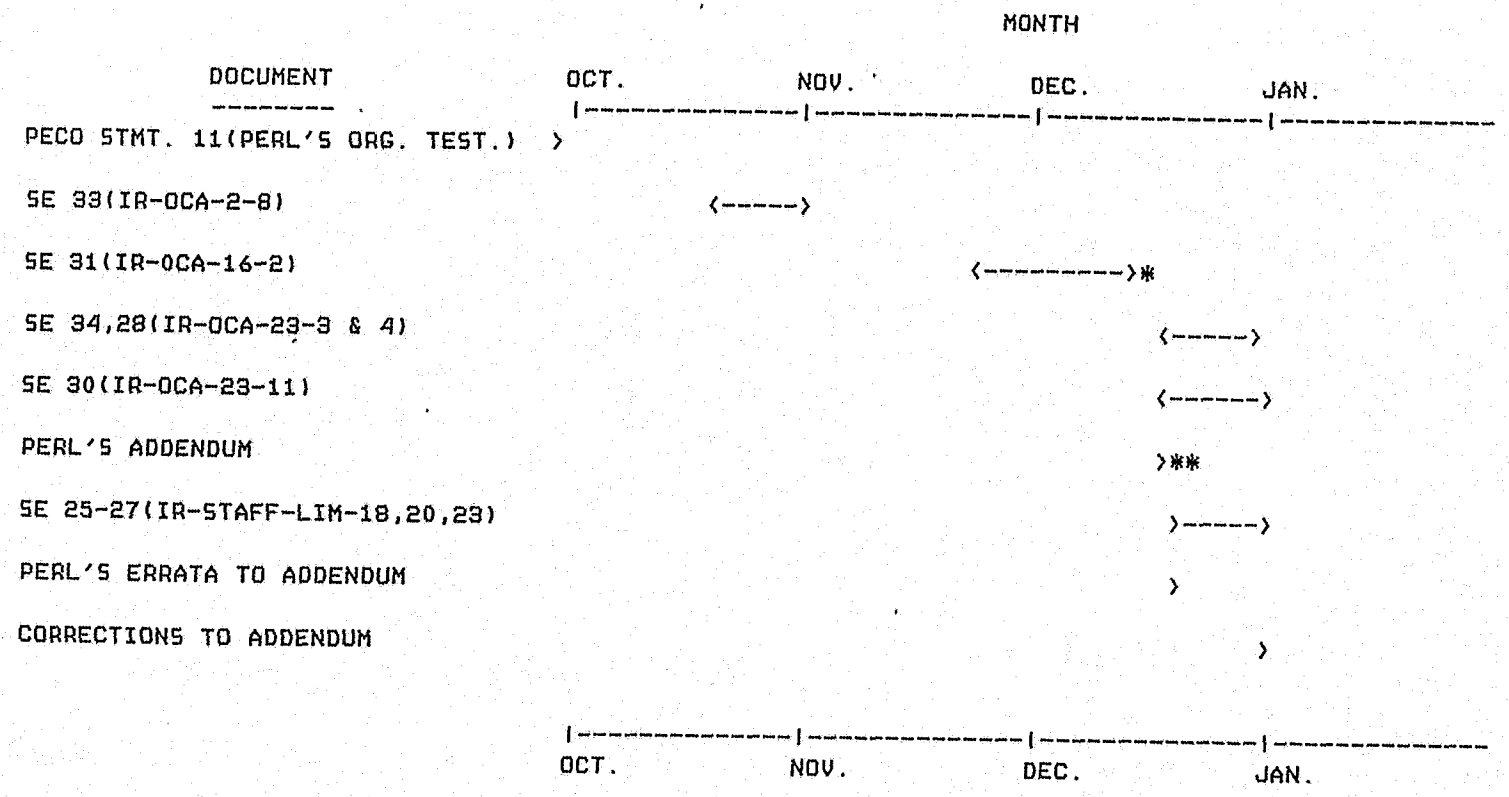
Dr. Perl's adjustments in his testimony are seen more clearly when examining a time line showing dates when interrogatories were requested and received, and dates Dr. Perl filed testimony and changes to his testimony. See Table 3

to this argument. Dr. Perl filed his original testimony on September 27, 1985 and an Addendum to his original testimony on December 16, 1985. In the Addendum, Dr. Perl stated that the new data available in September 1985 suggested an update to his testimony. Although the data base changed minimally, it is interesting to note: 1) the Addendum was not filed until well over two months after the new TVA study was released, and more interestingly, 2) the Addendum was filed after OCA asked on October 18, 1985 why a non-significant variable should be used in the regression analysis (IR-OCA-2-8, admitted as Staff Ex. 33), and 3) less than three weeks after OCA requested Dr. Perl to re-run his data excluding the non-significant variable (IR-OCA-16-2, admitted as Staff Ex. 31), he filed the Addendum which added a new variable.

If the new TVA data indicated that a new run should be made, why did Dr. Perl wait almost two months to file the Addendum, which he made available almost the same time as his cross examination? It seems obvious from examining the chronology of Dr. Perl's testimony, Addendum, and corrections, to the date that interrogatories were propounded, that Dr. Perl changes variables when necessary to show Limerick 1 ranked in the middle or close to the average. See the time line contained in Table 3 to this argument. Also Dr. Perl testified seven times between 1983-85 (see IR-OCA-2-1, admitted as Staff Ex. 36) using the same techniques with a very similar data base and never used

TABLE 3 TO ANALYSIS OF DR. PERL'S STUDIES

COMPARISON OF DR. PERL'S TESTIMONY VS. STAFF AND OCA INTEROG.



1985-86

* RANKING WITHOUT COOLING TOWER VARIABLE

** DR. PERL FILES ADDENDUM TO HIS DIRECT TEST. ADDING A NEW VAR.

SE= STAFF EXHIBIT

the variable "Construction Permit Received in 1972-73 Indicator." It appears that statistics were used to reach a pre-determined result.

(b) Dr. Perl's Assessment that Slowing Limerick Construction Expenditures in 1976 and 1978 were Economically Sound is Highly Suspect.

The issue of Limerick construction delays in 1976 and 1978 was addressed by Dr. Perl. Dr. Perl reached the following conclusion:

> [M]y analysis suggests that it was clearly economic to delay the project because it would result in lower costs to consumers. Moreover, even if the company's assessment was wrong and the more rapid construction schedules could have been achieved without any interest rate effect, the delay had no significant impact on consumer costs.

(PECO St. 11, p. 23-24).

On pages 1 and 3 of Schedule 7 of PECO St. 11, Dr. Perl lists his estimated costs and savings from the Limerick 1 delay. Numerous savings on Schedule 7 are quite suspect for the following reasons:

1. The estimated fuel savings under "Fuel: Other Years" could be substantially lower if lower estimates were used for coal escalation costs.

2. A higher discount rate would also lower the savings.

3. Cogeneration, if given the opportunity to develop, would decrease the savings from capital additions

and fuel costs at the end of Limerick 1's life.

4. Dr. Perl's prior inconsistent statements.

A large percentage of the savings (those numbers with negative signs) shown on Schedule 7, pages 1 and 3 are savings that occur after Limerick retires. The percentage was calculated by totaling the savings line items on Schedule 7 and dividing that number into "Capital" and "Fuel: Other Years." The estimated savings for "Fuel" amounted to between 56%-66% of the total savings from the delay. The combination of estimated savings from "Capital" and "Fuel: Other Years" ranged from 78%-88% of total savings.

Clearly, much of the savings attributable to delays under all the scenarios proposed by Dr. Perl are very soft estimates of prices 30 to 35 years in the future. Given the difficulty of accurately forecasting ten years in the future, and the difficulty the witnesses acknowledge in making even longer range forecasts, too great a percentage of Dr. Perl's estimated savings (78%-88%) occur 30-35 years from now to even suggest that "delay had no significant impact on consumer costs." Even a small error in a couple of assumptions reduce the savings. The three reasons previously mentioned concerning why savings from Schedule 7 are questionable will now be examined in more detail.

i. Estimated Fuel Savings

Dr. Perl's estimated "Fuel: Other Years" savings is the largest item contributing a positive effect on construction delay. This large savings is contingent on the high escalation rates Dr. Perl uses for coal. As one projects further into the future, what appears to be a small difference in assumptions for escalation rates, has a compounding effect that greatly widens the difference 20-30 years in the future. For example, the $1,000 compounded annually 20 years at 3% is 22% higher than $1,000 compounded annually at 2%. The same money at the same compounded annual interest rates for 30 years is 34% higher.

Mr. Komanoff demonstrated PECO's higher assumptions for coal costs in Exhibit CK-9, OCA Statement 6. He suggests a real escalation for coal of zero percent through 1990, 0.5% annually through 2000, and 1% thereafter. PECO suggests an annual real increase of 2% for coal over the life of Limerick (OCA Statement 6, p. 30). This increase was 15% higher than DRI's projected coal prices over a 20 year period. (Id., p. 31.) The ALJ in the Limerick 2 investigation agreed with Mr. Komanoff's projections, stating "the evidence indicates that coal price growth rates will be lower than PECO predicts, and that Mr. Komanoff's projections are reasonable." (Id., p. 32). In summary, Dr. Perl's and PECO's escalation rates for coal are too high; and the higher one estimates the cost of coal, the greater the savings that can be shown.

ii. Discount Rate

The lower discount rate Dr. Perl uses gives greater weight to savings well into the future than one suggested by Mr. Chernick (UUC/UP St. 1, p. 77-81). The higher discount rate would lower the savings values substantially on Schedule 7, but have a small change on most costs as they occur in the early years.

iii. Cogeneration Impact on Savings

Dr. Perl second largest category for savings is delaying the need for capital additions (see "Capital" under "Effect of Delay on Other System Costs", Schedule 7). This savings could be reduced if PECO would encourage cogeneration development in the service territory. It is widely accepted that utilities can buy capacity from cogenerators at a rate per Kw less expensive than building coal or nuclear units.

In addition, if cogeneration was allowed to develop, the "Fuel: Other Years" savings would be much less as PECO would be buying cogenerated energy that would cost less than building more expensive coal generation units as postulated by Dr. Perl. If PECO would pay cogenerators the avoided energy cost Mr. Chernick derived from PECO supplied data (UUC/UP St. 1, Table 3.1, Column 6), there is a very good chance much of the future energy needs that would be generated by coal would be provided by cogenerators. Comparing the avoided costs data in Mr. Chernick's Table 3.1 with Form 1 of Staff Exhibit

No. 22, shows PECO is underpaying cogenerators their avoided cost by 29% in 1990 to almost 84% in 1994.

iv. Dr. Perl's prior inconsistent statements.

As indicated in a prior Section of this argument, Dr. Perl has twice previously testified before this Commission that delays in Limerick construction would increase the cost of the unit and reduce the savings for the unit. The testimony is contained in OCA Exhibits 44 and 45.

iv. Conclusion

Dr. Perl has only been able to show that delays had no significant impact on consumer costs by making some very ambitious assumptions. On Schedule 7 under Perl's "Expected Cost of Money" assumption, consumers will certainly be harmed by the construction delay, if the only adjustment is a more realistic escalation rate for coal. Under the unlikely "High Cost of Money" Scenario, a combination of more realistic escalation rates and more purchases of cogenerated power would probably show a net cost to consumers. It is submitted that Dr. Perl's testimony in this proceeding is riddled with questionable statistical practices, ambitious assumptions, and is highly suspect because of inconsistencies in his prior and present testimonies. Dr. Perl's expensive testimony has no value in this proceeding.

d. PECO's Claim That it Would Have Required $339 million in Additional Revenue Requirement From 1975 to 1985 to Maintain Mortgage Indenture Coverage for Earlier Limerick Unit 1 In-Service Dates Ignores Ratemaking Limitations and Alternative Methods of Financing.

Through its witness Thomas P. Hill, Jr. PECO presented testimony which attempted to quantify the revenue requirement impact on customers for Limerick Unit No. 1 and common plant, assuming a November 20, 1983 in-service date as proposed by OCA witness O'Brien. Although this testimony is directed primarily at the Consumer Advocate's proposed Limerick adjustment, the Trial Staff believes that the conclusion advanced in the rebuttal testimony of the Company's financial witness is so extreme and distorted as to require some response by the Staff. Mr. Hill calculated that the revenue requirement impact would have been $336 million[24/] if 100% of Common Plant was included (PECO Statement No. 18E, page 4 or Schedule 1) and $448 million[25/] if only 50% of Common Plant was included (PECO Statement No. 18E, page 5, or Schedule 2). Of these amounts, Mr. Hill has calculated that $339 million (on a June 30, 1986 present worth basis) is attributable to additional revenues needed to maintain mortgage coverage for the earlier in-service date.

24/ Excluding Gross Receipts Tax.

25/ Excluding Gross Receipts Tax.

Initially it must be noted that the $339 million figure estimated by Mr. Hill as the additional revenue requirement is inflated. In the surrebuttal testimony of Staff witness Robert A. Rosenthal (Staff St. RAR-2), Mr. Rosenthal identified several internal compounding errors contained in PECO St. 18D, Schedules 7.1 and 7.2 (Staff St. RAR-2, p. 7-8). The corrected figures, which were updated and modified by Mr. Rosenthal at Tr. p. 4698, were accepted by PECO witness Hill at Tr. p. 4737. These corrections are indicated below:

		Schedule 1 Revised 3/10/86 (PECO St. 18K)	Staff Modifications Corrected at Tr. 4698
1.	Annual carrying charge differential for capital costs of Limerick No. 1 and 100% common plant based on change in service date (Schedule 1.2, revised 3/10/86)	($63)	(72)
2.	Change in fuel expenses and non-fuel O&M expenses in period November 1983 to February 1986 (From PECO Statement 18D, Schedule 7.5)	(146)	(147)
3.	Additional Carrying charges for capital costs of coal unit replacing Limerick No. 1 from July 2022 to October 2024 (From PECO Statement 18D, Schedule 7.8)	169	167
4.	Change in fuel expenses and non-fuel O&M expenses in period July 2022 to October 2024 (From PECO Statement 18D, Schedule 7.10)	65	64
5.	Change in Customer Revenue Requirements from 1975 to Maintain Mortgage Coverage for Earlier Service Date (Schedule 1.8)	339	335
6.	Total change in present worth of revenue requirements		
	a. Excluding gross receipts tax	$364	347
	b. Including gross receipts tax	$381	363

1. The Commission found evidence of this type unpersuasive in the Limerick I Investigation.

The Company has offered the rebuttal testimony of PECO witnesses Hill and Paquette in another effort to demonstrate that the 1976 and 1978 Limerick construction delays actually saved the ratepayers money and that continuous construction would have cost the ratepayers more ($339 million) in the long run. This kind of economic benefit argument was previously offered by the Company in the Limerick I Investigation at I-8010034 and found to be unpersuasive by both the Presiding Officer and the Commission.

In its Order of January 17, 1986 at this docket number (entered January 21, 1986) which affirmed the Presiding Officer's Motion in Limine ruling, the Commission quoted at length from its August 28, 1982 Order which concluded the Limerick I Investigation. In the following portion of that quote, the Commission ruled on an economic benefit claim similar to that being raised here by the Company:

> PECO's final argument, that the relative economic benefits and detriments to ratepayers and shareholders of earlier versus later plant completion favored delay, is unpersuasive. We find this argument curious in light of the fact that PECO stresses that, because load growth has declined, the Limerick Units' main purpose is to replace oil fired generating capacity. If Limerick can be economically justified when compared to a combination

> of alternative sources of power and the retirement of oil fired plants, which by now have been extensively depreciated, the relative benefit to current ratepayers would have been greater if the oil capacity, and their associated costs, had been retired earlier by way of compressing rather than expanding the construction schedule. Further, as the nation as a whole experienced a period of double digit inflation and rising interest rates, delaying the necessary financing did and will continue to increase the ultimate costs of the plant financing.

Commission's Order of January 17, 1986 at page 8 (emphasis added).

The Company is now attempting to raise an economic benefit argument of a similar type. Using generous amounts of hindsight, the Company now finds a financial benefit to ratepayers in its prior behavior which the Commission found to be imprudent. As developed in this argument, the Company's claim is inconsistent with traditional ratemaking concepts and is also inconsistent with the testimony of its own witnesses. The Trial Staff submits however that in view of the Commission's prior rejection of a similar argument in the Limerick I Investigation, the Presiding Officer could reject this claim out of hand on the basis that it has already been rejected by the Commission and therefore irrelevant to this proceeding.

2. Ratemaking Limitations

The ratemaking formula for determining revenue requirement for public utilities is well known and understood.[26/] A revenue allowance to maintain mortgage indenture coverage is not part of that formula. From a practical ratemaking standpoint, PECO could not have supported $339 million of additional revenue requirements during the period 1975 through 1985. A review of the Direct Testimony of Joseph F. Paquette, Jr. (PECO Statement No. 3, Table 13) demonstrates that PECO had rate cases almost continuously in process during the period 1975 through 1985. The revenue increases which PECO was allowed in the rate cases were in the amount legally determined by the Commission based on the record in each case. The hypothetical OKA Financing Plan developed by Mr. Paquette (PECO Statement No. 3B, Tables 4 and 5), which Mr. Hill relied upon to determine his $339 million revenue

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26/ The Revenue Requirement has been defined in public utility economic books as:

$$R = O + (V - D)^{r}$$

Where R is the total revenue required,
O is the operating cost,
V is the gross value of the tangible and intangible property,
D is the accrued depreciation of the tangible and reproducable property, and
r is the rate of return.

Phillips, The Economics of Regulation, p. 129 (Revised Edition, 1969).

requirement, would not have increased rate base or operation and maintenance expenses in any of these rate cases. While Construction Work in Progress (CWIP) would have increased in the years 1975 through 1982 due to increased investment in Limerick during this period, the Commission did not allow major project CWIP in rate base. See Pennsylvania Public Utility Commission v. Philadelphia Electric Co., R-811626 (1982). Nor would additional revenues have been supportable due to cost of capital increases. While PECO has not provided a schedule or exhibit which shows its cost of capital on a year by year basis under the hypothetical financing plan, Mr. Hill has recalculated PECO's AFUDC rates under the plan (PECO Statement No. 18E, Schedule 1.6). The AFUDC rates are essentially based on PECO's net of tax cost of capital. An analysis of Schedule 1.6 shows that the change in the AFUDC rates on an actual vs. hypothetical basis was not significant, as summarized below:

	AFUDC RATE	
Period	Period Average Actual	Period Average Hypothetical
1975-1983	8.30%	8.29%
1975-1985	8.51%	8.53%

Thus, PECO's own calculations demonstrate that it could not have obtained any material revenue increases during the period 1975-1985 due to increases in cost of capital.

In summary, Trial Staff would note that in order for PECO to support its claim for additional revenue requirements due to an earlier in-service date for Limerick, it must apply its hypothetical financing plan in a manner which would have been permitted within the regulatory framework. It has not done so. Mr. Paquette's hypothetical financing plan, which Mr. Hill has relied upon, would not have increased PECO's rate base, operation and maintenance expenses, cost of capital, or any other ratemaking element which might have permitted the Commission to grant PECO rate increases over and above those granted in its numerous rate cases that were adjudicated during the period 1975 through 1985. While mortgage indenture coverage is one of many elements of risk which may affect a utility's cost of capital, it has never been the basis for directly allowing so much as one dollar of additional revenues in this jurisdiction. A revenue requirement must be supported by some element of the ratemaking formula. It cannot be the creative by-product of a vivid imagination.

3. Alternative Methods of Financing

If PECO could convince the Presiding Officer that it could have supported a claim for additional revenue requirements in the amount of $339 million during the period 1975 through 1985 to maintain mortgage indenture coverage[27/],

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27/ As noted in the prior argument, maintaining interest coverage is not a basis for permitting a revenue requirement in this jurisdiction.

Trial Staff would further argue that this amount could have been significantly reduced if PECO would have pursued alternative methods of financing Limerick construction.

During 1983, PECO entered into a revolving credit/term loan agreement with a consortium of banks in order ". . . to postpone the need to raise long-term debt capital in the public market for the 1984-85 period when coverages would be substandard for the years beyond 1985 when the company's earnings and cash flow will be enhanced with Limerick Unit No. 1 and associated common plant in rate base." (Tr. p. 4840). This agreement was initially negotiated for the amount of $1.1 billion to provide debt capital for both Limerick units. The Commission rejected PECO's securities certificate for the initial $1.1 billion revolver but subsequently registered a securities certificate for an $800 million revolving credit/term loan agreement to be used for Limerick Unit No. 1 and common plant only. The initial agreement had a revolving credit period of five years while the $800 million agreement had a revolving credit period of four years. Both agreements called for repayment over a four year period based upon eight semi-annual payments.

During cross-examination, Mr. Paquette exhibited extensive knowledge of revolving credit agreements. He acknowledged that PECO had negotiated a $400 million domestic revolving credit/term loan agreement in 1980 (Staff Exhibit

No. 37) and a $100 million European line of credit in 1981 (Staff Exhibit No. 38) (Tr. p. 4841). Mr. Paquette also stated that "[m]y recollection of what other utilities were doing at that time, throughout the whole 70's and until the early 1980's, was that almost all utilities had some form of back-up lines of credit for financial flexibility and to provide emergency capability." (Tr. p. 4860, 4861). Mr. Paquette further acknowledged that prior to signing the $400 million revolving line of credit, PECO had "backup capability in terms of bank lines with local banks in Philadelphia, and we did arrange some specific loans from a number of banks during the 70's." (Tr. p. 4861). In his direct testimony, Mr. Paquette had testified that "[i]n early 1974, the Company negotiated $225 million of terms loans with four large New York banks that provided the Company with a fixed-term commitment that could be repayed early without penalty. This financing was arranged to avoid selling mortgage bonds when our coverage ratio was exceedingly low." (PECO Statement No. 3, p. 30).

Mr. Paquette also extensively discussed in his direct testimony and during cross-examination, the innovative financing techniques which PECO undertook to finance its construction program. (PECO Statement No. 3, pages 30, 31; Tr. p. 1470-1473, 4842).

Clearly, PECO's financial management had the knowledge and the experience to utilize revolving credit/term loan

financing or some other form of bank financing in lieu of using first mortgage bonds when its mortgage indenture coverage was endangered during the Limerick construction period. Shown below is a two column excerpt from PECO Statement No. 3B, Table 7:

	Mortgage Coverage	
	Actual	Hypothetical
1975	2.53x	2.47x
1976	2.48	2.38
1977	2.34	2.10
1978	2.35	2.14
1979	2.07	1.89
1980	2.26	2.09
1981	2.11	1.99
1982	2.42	2.33
1983	2.26	2.33
1984	2.55	4.31
1985	1.98	3.79

These columns show a comparison of mortgage interest coverage on an actual basis and under the hypothetical OKA Financing Plan developed by PECO. Trial Staff believes that beginning in 1979, when the hypothetical interest coverage was 1.89x, PECO could have used bank financing, in the form of a Limerick type revolving credit/term loan agreement, or a similar financial

instrument structured to provide PECO with the debt capital necessary to meet the November 20, 1983 in-service date for Limerick. The repayment period of this financing could also have been tailored to coincide with the in-service date of Limerick (as was the Limerick Revolving Credit Agreement).

Under the OKA Financing Plan, PECO did not issue mortgage bonds in the years 1979 through 1982 to provide the additional capital needed to meet the November 20, 1983 in-service date (PECO Statement No. 3B, Table 4). However, as part of its actual financing plan which underlies the OKA Plan, PECO issued $748.5 million of first mortgage bonds, in eight separate issues during the years 1979 through 1982 (PECO Exhibit JFB-1, Schedule 4, page 9 of 10). Trial Staff has prepared Table 1 which summarizes these eight issues. Replacement of these first mortgage bond issues with a bank financing agreement similar to the Limerick Revolving Credit Agreement would have maintained PECO's mortgage indenture coverage thus eliminating the additional present worth revenue requirement of $192.151 million which Mr. Hill has calculated for these four years (PECO Statement No. 18E, Schedule 1.8, Page 2). In addition, the $64.695 million revenue requirement which Mr. Hill has calculated for 1983 should also be eliminated for any of three reasons:

- As shown in the previous comparison, PECO's hypothetical mortgage coverage was 2.33x as compared to 2.26x on an actual basis, thus needing no improvement.

- The use of a revolving credit agreement or similar bank financing would have maintained PECO's mortgage coverage at sufficient levels from 1979 to 1983 to eliminate the need for additional revenues.

- A revolving credit agreement could have been negotiated with a five-year revolving period thus eliminating the need for additional revenues.

In answer to a question posed by his counsel during redirect examination, Mr. Paquette stated that had PECO used a line of credit during this period instead of issuing mortgage bonds or debentures, it would not have had any significant impact on the revenue requirement needed to maintain its financial integrity (Tr. p. 4861). He reasoned that substantial rate increases would have been needed ". . . to maintain the SEC coverage, because both the unsecured and the mortgage debt is included in the SEC coverage,

and in fact it might have required a greater rate increase under the SEC coverage test because we probably would have been paying or could have paid a higher interest rate for the term loans than the unsecured debt or mortgage bonds." (Tr. p. 4862).

Trial Staff disputes his reasoning. We had previously noted that the maintenance of a mortgage indenture coverage is not an accepted regulatory basis for determining a revenue requirement. The same is true for SEC coverage. Trial Staff would point out that maintenance of a mortgage indenture coverage, or SEC coverage on a hypothetical basis equal to its actual coverages is a self imposed criteria used by PECO to justify its calculated $339 million revenue requirement. Although its hypothetical SEC coverage was lower than actual during the 1975 through 1985 period, the difference is not that significant as shown in the following comparison:

Year	Pre-Tax Interest Coverage Including AFUDC (SEC) Historical	Hypothetical	Difference
1975	2.44x	2.42x	-.02
1976	2.59	2.53	-.06
1977	2.50	2.39	-.11
1978	2.44	2.37	-.07
1979	2.20	2.08	-.12
1980	2.14	2.04	-.10
1981	2.15	2.10	-.05
1982	2.37	2.31	-.06
1983	2.37	2.35	-.02
1984	2.44	3.06	+.62
1985	2.31	2.88	+.57

Source: PECO Statement No. 35A, Table 1 (Revised).

The decrease in SEC coverage under the OKA Financing Plan would certainly not have justified $339 million of additional present worth revenue requirements. Nor would the higher interest which PECO would have paid on borrowings under a revolving credit agreement had a material effect on its coverages as Mr. Paquette has stated. Trial Staff Table 1 includes a comparision of interest expense based on the first mortgage bonds which PECO actually issued during the period 1979 through 1982 and borrowings under a Limerick Revolving Credit Agreement if PECO had used this type of financing. Column 3 shows the actual effective interest rates for each bond issue. Column 4 is the prime

rate which was in effect on the date the bonds were issued plus any additional basis points which were imposed under the Limerick Credit Agreement. As shown in Column 8, the increase in interest expense over the period would have totaled only $13.99 million. Of this amount, $5.3 million would have been allocated to construction, leaving only $8.69 million. This would have had an insignificant effect on PECO's SEC coverage.

If the Presiding Officer believes that some level of additional revenues were appropriate to maintain interest coverage, Staff contends that it would not be the $339 million calculated by PECO. This revenue requirement should be reduced by at least $256.84 million to reflect bank financing alternatives which would have been available during the years 1979 through 1983.

TABLE 1

Summary of Additional Interest Costs Resulting from
Using Revolving Credit/Term Loan Agreement for Debt Financing
As Compared to Using First Mortgage Bond Financing During the Years 1979, 1980, 1981 and 1982

Amount ($ Million) (1) ($)	Date Issued (2)	Effective Bond Rate (3) %	Prime Rate (1) (4) %	Interest Days (6) (5)	Bond Interest Cost (6) $	Prime Interest Cost (7) $	Interest Cost Diff. (8) $	Interest Chg. to Constr. to Total Interest (7) (9) %	Portion Allocated to Construction (10) $
100.0	10/15/79	12.64	14.50	1172	40.59	46.56	5.97	33.87	2.02
125.0	10/15/80	13.90	14.00	807	38.42	38.69	.27	40.86	.11
52.5	4/28/81	15.40	17.50	612	13.56	15.40	1.84	41.47	.76
21.0	4/28/81	15.17	17.50	612	5.34	6.16	.82	41.47	.34
125.0	7/1/81	18.01	20.00 20.25 (2)	549	33.86	37.69	3.83	41.47	1.59
125.0	9/15/81	18.96	20.75 (3)	472	30.65	33.54	2.89	41.47	1.20
100.0	4/1/82	18.39	16.50 17.00 (4)	275	13.86	12.61	(1.25)	43.85	(.55)
100.0	10/1/82	15.53	14.00 (5)	92	3.91	3.53	(.38)	43.85	(.17)
$748.5					180.19	194.18	13.99		5.30

Notes: (1) Based upon latest prime rate in effect prior to the issue date of the first mortgage bonds.
(2) Due to Revolving Credit borrowing requirements, $23.5 million would be issued at a 20.25% rate (1/4% above prime).
(3) Due to Revolving Credit borrowing requirements, the $125 million of bonds would be issued at 1/4% above prime.
(4) Due to Revolving Credit borrowing requirements, $48.5 million would be issued at a 17.0% rate (1/2% above prime).
(5) Due to Revolving Credit borrowing requirements, the $100 million of bonds would be issued at 1/2% above prime.
(6) Calculated from date of issue until December 31, 1982.
(7) Calculated from Annual Reports filed with the Commission.

Source of Information: Columns 1, 2 and 3 are from Exhibit to Accompany the Direct Testimony of Joseph F. Brennan.
(PECO Exhibit JFB-1, Schedule 4, Page 9 of 10)

E. Other Limerick Issues

1. PECO's Limerick Claim Should Be Reduced To Reflect Construction Errors By Bechtel

Trial Staff witness, Michael Gruber, recommended an adjustment to PECO's Limerick claim which would disallow the costs associated with various construction errors by Bechtel. (Trial Staff Statement MJG-1, p. 4-5). Mr. Gruber's proposed adjustment represents a reduction of $8,890,000 in direct cost and $4,388,000 in AFUDC costs for a total rate base reduction of $13,278,000. (Trial Staff Statement MJG-1, p. 5). The corresponding adjustment to depreciation expense would be $364,000, (Tr. 2991). The basis for Staff's adjustment was set forth in Mr. Gruber's direct testimony:

> Q. Why should these costs be disallowed?
>
> A. PECO should not be allowed to recover this investment because it was money spent on work that had to be redone because of errors in construction. As such these costs are not for plant which will be used and useful in the public service. To recognize these dollars would double count the cost of placing these items in service.

(Trial Staff Statement MJG-1, p. 5).

Mr. Gruber maintained that the assumption of the costs for these contractor errors should not be foisted on the ratepayers. The errors did not result in the construction of items which would prove to be used and useful in the operation of the plant and are not costs properly borne by PECO's customers.

With regard to whether these items represent actual claims Mr. Gruber testified as follows:

> Q. Now, with regard to the claims against Bechtel, are you aware that these items only represent potential claims against Bechtel and were compiled principally to enhance Philadelphia Electric's bargaining power in contract and fee negotiations with Bechtel?
>
> A. I know that they represent potential claims and as yet no formal claim has been made. However, if it's an error in construction I don't think the ratepayers should pay for it regardless of whether it's being used as a bargaining chip or whether or not PECO is honestly trying to get their money back.

(Tr. 3012).

The Commission filing requirements at 52 Pa. Code §53.53, Item II-A-3 provides, in part:

> Q.3. Whenever a utility proposed to add a major generating station to rate base, the utility shall identify:
>
> * * *
>
> b. All outstanding claims against project managers, contractors and/or suppliers and their estimated costs.

Pursuant to this requirement, PECO submitted the list of contractor errors which are the subject of Staff's adjustment. The list consists, apparently, of errors in construction which have resulted in the work being redone. Staff submits that it would be inappropriate to allow such items in rate base. This action would result in a double

counting for the work by allowing a return on both the old and the new construction. Under this scenario, ratepayers would be providing a return on the same plant twice.

The adjustment proposed by Mr. Gruver is reasonable and should be adopted by the Administrative Law Judge.

2. The 28 Percent Markup To Limerick Materials and Supplies Purchased By Bechtel Should Be Disallowed.

This item of controversy pertains to a 28 percent markup on Bechtel's costs for the purchase of Limerick materials and supplies for a limited period of time. The focal point of the issue is an internal audit report by PECO dated January 29, 1985. The report states in pertinent part:

> Bechtel Purchase Orders
>
> Effective July 1, 1984, PECO Purchasing Department requested Bechtel Construction, Inc. to temporarily assume the duties of procuring operational spare parts and materials for Limerick Generating Station. Purchasing stated that it was unable to meet the needs of Limerick, at the time, and that expected duration of the Bechtel assistance was 12-18 months. According to terms of the agreement, Bechtel is to pay for the ordered materials and, in turn, PECO will be billed at their cost, plus the associated cost of labor with a 28 percent markup. Two hundred seventy eight payments for $212,102 were made by Bechtel during August, September, and October. Associated labor cost was $18,438, or about $66 per order (PECO's cost is approximately $70). (emphasis added) (Staff Exhibit No. TVP-1B, p. 3).

Staff witness, T. V. Prowell, proposes that the 28 percent markup be disallowed for ratemaking purposes. (Staff Stmt. TVP-1, p.5). The basis for the disallowance is the non-recurring, abnormal circumstances of the markup. As the audit report indicates, Bechtel's assistance was on a temporary basis and is not part of the normal operation of

Limerick's purchasing operation. Rates are set on the basis of a normalized test year for a normal period of operation.

PECO has argued in response that the Staff's adjustment improperly applies the 28 percent markup to the direct costs of the material and the cost of labor. PECO witness, Richard Wm. Wright, testified that the markup is applicable only to the cost of labor associated with the procurement activities. (PECO Stmt. 20A, p. 9-10). PECO also contends that the 28 percent includes payroll taxes, unemployment compensation insurance, and employee benefits (Id., p. 10).

PECO has not presented any supporting documentation for the assertion that the 28 percent markup includes the items described above. The internal audit report states that PECO will be billed at the cost of the materials "plus the associated cost of labor with a 28 percent markup." The associated cost of labor has not been shown merely to include wages. As has been the case with PECO in the past, claims are made in the rate case without adequate support and when querried about such accounts, the response is that the items cannot be segregated from other items. (Staff Exhibit TVP-1B, p. 7).

The issue is one of burden of proof. Here, Bechtel assigns a twenty eight percent markup to the purchases without any accounting by PECO for the reasonableness of the markup or a breakdown of the markup. The company's internal audit report refers to associated labor costs and is not restricted to simply wages. It was incumbent upon PECO in lieu of the

challenge to come forward with some affirmative evidence, either through documentation or testimony of a witness directly involved in the transactions that would establish the propriety of the claim. A statement from a witness who is not associated with the issues involved cannot carry any weight in this proceeding.

Staff's adjustment to PECO's Limerick materials and supplies is appropriate because it recognizes the temporary nature of the 28 percent markup. In addition, the claim should be disallowed on the burden of proof issue. PECO has not shown the Judge how the 28 percent was arrived at by PECO and Bechtel nor whether the 28 percent markup was a reasonable figure.

3. A rate phase-in is not necessary in this proceeding.

PECO's current rates are among the highest in the nation as the result of the construction decisions made by its management. Based upon the company's proposal in this case, rates will be increased by 39% in four years (Tr. 619). Obviously, should the Commission permit recovery of most or all of the requested increase, then it is inevitable that ratepayers of all classes will experience the "rate shock" testified to by many expert and public witnesses, with the resulting loss of jobs, increased prices for the necessities of life and housing.

In response to the company's proposal, several witnesses in the case at bar presented alternate phase-in programs. See, for example, City statements 1, 1A, 2, and 2A (Schinar, Palast): GEC Stmt. 1D (Wilson); OCA Stmt. 7 (Knudsen); UP/UUC Stmt. 1 (Chernick) and PAIEUG Stmts. 1 and 1A (Falkenberg). As Staff's recommendation is that PECO's current level of base rates be reduced by approximately $369,000,[28/] a rate phase-in is neither necessary nor appropriate.

While Staff feels that rate phase-in programs are not a part of the traditional ratemaking process (in contrast

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28/ As shown in Tables I and II:

	(Million)
Staff recommended gross increase	$339
Less: Limerick #1 savings	(211)
Base fuel adjustment per ECRF	(127)
Net revenue increase (decrease)	(1)

to the prior practice of multistage filings now prohibited by Section 1308(f) of the Public Utility Code), it recognizes that they are appropriate in certain limited circumstances. In light of the current high rates, and the unprecedented magnitude of the requested increase, a phase-in of some sort will be necessary should the Commission grant PECO a substantial increase.

Therefore, while Staff takes no position as to the merits of the competing proposals, it respectfully suggests that the Commission order any net rate increase in excess of $300 million to be phased-in over a number of years.

4. Limerick Common Plant Is Intended To Serve Both Limerick Units And Costs Should Be Devided Equally Between Both Units.

Trial Staff witness, Michael J. Gruber, has proposed that only 50 percent of common plant be included in rate base. (Trial Staff Stmt. MJG-1, pp. 3-4). Mr. Gruber's recommendation is based upon past Commission policy which recognizes that common plant serves both units at a single generating station equally and that the costs of these common facilities should be born equally by the ratepayers served by the units. In the present case, PECO has sought to include 100 percent of common plant in rate base despite prior Commission pronouncements.

The Commission's policy with regard to common plant was set forth in Pa.PUC v. Duquesne Light Company, 52 Pa. P.U.C. 552 (19) in its treatment of common plant associated with the Beaver Valley Nuclear Units. In that case the Commission disallowed 50 percent of Duquesne's share of common plant costs. (Id., p. 559) The same policy on shared costs was applied in the Duquesne case with regard to the common plant associated with the Bruce Mansfield Units 1, 2 and 3.

The Commission's policy on the ratemaking treatment of common plant recognizes that although the common facilities may serve the first unit, common plant also will be needed to serve the second unit on an equal basis. Since the ratepayers served by both units will require the use of the

common plant, the ratepayers of each unit should bear the costs on an equal basis. It is imperative that the interests of current and future ratepayers be recognized. This balancing of interests can best be met where the Commission allows the inclusion of only 50 percent of common plant in rate base at the time Unit 1 is allowed in rate base.

In the present case, PECO has presented no reason why the Commission should change its prior practice and burden the ratepayers to be served by Limerick Unit No. 1 with the total costs of common plant. Trial Staff's adjustment to rate base should be adopted. This would result in the elimination of $629,472,000 from rate base and a reduction of $16,912,000 from annual depreciation expense. (Trial Staff Stmt. MJG-1, p. 4).

5. The Staff's proposed Limerick adjustment properly balances the interests of ratepayers and shareholders.

The Trial Staff submits that its proposed Limerick adjustment properly balances the interest of the Company's ratepayers and shareholders. The Commission's responsibility to establish just and reasonable rates for PECO also includes an obligation to protect the public from being victimized by the monopoly power of a public utility. In the instant case, the Commission has previously determined that PECO's decisions to delay Limerick construction in 1976 and 1978 were imprudent. It is both the Presiding Officer's and the Commission's responsibility to protect the ratepayers from the costs of PECO's imprudency. By attempting to identify the costs related to the Company's imprudent behavior, the Staff's proposed Limerick adjustment permits the Company to recover the costs legitimately incurred in bringing the Unit into the service of the public. The proposed adjustment achieves a proper balance by recognizing the Company's interest in recovering its prudent costs with the ratepayer's interest in being protected from the economic consequences of the Company's imprudent actions.

a. The principles of the law of negligence have no application in measuring the consequences of the Company's imprudence.

The Company has sponsored the testimony of Dr. William H. Hieronymus (PECO Sts. 15, 15A, 15D) in this

proceeding to discuss the standards appropriate to the rate base treatment of Limerick Unit No. 1 from the perspective of a utility economist (PECO St. 15, pp. 3-4). Despite the fact that Dr. Hieronymus did not know whether he was a member of the American Economic Association (Tr. 672), or that he had never been a presiding officer over a public utility administrative proceeding or acted as a member of a public utility commission (Tr. 672-3), or that he was familiar with only some of this Commission's precedent on utility prudency (Tr. 673-5), Dr. Hieronymus bravely offered the following guidance in measuring PECO's responsibility for the 1976 and 1978 Limerick construction delays:

> To borrow from another section of law regulating conduct in the public interest, a utility may be 'liable' based on a finding of unreasonable assumptions, but there are no 'damages' since no imprudent decisions resulted.

PECO St. 15, p. 27.

As far as can be determined, Dr. Hieronymus appears to be offering a theory that states that the law of negligence must be applied in determining the economic consequences of the Company's imprudence. The drum beat of Dr. Hieronymus' theorem is taken up in the Company's rebuttal testimony which demands a demonstration of proximate cause and damages by the intervenors before the Company can be responsible in any manner for its imprudence in delaying Limerick construction in 1976 and 1978. It is respectfully submitted that the principles of negligence have no place in this quasi-judicial administrative proceeding.

It is simply not correct that there must be a real and proximate causal relation between some injury and the alleged imprudence. As developed extensively in this brief, the burden is on the Company to establish the prudency of its Limerick expenses. It is simply not the case that once "imprudency" is established, the next step is to determine whether there was "injury" which was "directly and proximately" caused by the "alleged imprudence." There is no injury at issue in this case: this is a Section 1308 rate proceeding in which the focus is on whether PECO acted prudently in incurring the subject costs. This fact, that a causal correction is not relevant to a proceeding in which the burden is on the utility to establish the prudency and reasonableness of its actions, has been recognized by the Commission. In Re: Beaver Valley I Generating Station, 57 Pa. P.U.C. 371 (1981), a causal connection requirement was explicitly rejected by the Commission:

> Were the burden of proof upon the Commission or some other party in this proceeding, we believe that it would require that the evidence establish imprudent conduct on the part of Duquesne in advance of the NRC Show Cause Order and a causal connection between that imprudent conduct and the issuance of the NRC Show Cause Order.

57 Pa. P.U.C. at 381 (emphasis supplied).

The Commission went on to reject that standard, including the causal connection, and in fact recognized that this connection is not relevant in the type of the proceedings,

such as the case at bar, in which the burden is on the utility to establish the prudency of its claimed costs:

> The fact that a failure to Duquesne to meet its burden of proof and demonstrate prudence (lack of imprudence) on its part places upon it the consequences of the NRC Show Cause Order, when there may have, in fact, been no connection between the two, is not an infrequent result of the imposition of the burden of proof upon one party or another.

57 Pa. P.U.C. at 382 (emphasis supplied).

Staff respectfully submits that it is essential that the Presiding Officer and the Commission realize that this is not a negligence action, in which a plaintiff who has suffered injury is attempting to tie a defendent's conduct to that specific injury. Instead, this is a proceeding in which the company has claimed certain costs and the Commission is scrutinizing the justness and reasonableness of those costs. The fact that the Commission has chosen to apply a reasonableness standard, rather than one employing hindsight, to evaluate the utility's actions, does not transform this proceeding into a common law negligence action.

b. The Company's evidence concerning the economic consequence of the Staff's proposed Limerick adjustment is not persuasive.

In the rebuttal testimony of Joseph F. Paquette, Jr., (PECO St. 3A, p. 2-4), the Company has sponsored testimony which purports to show dire consequences to the Company

which would result if the Trial Staff's proposed adjustments were adopted by the Presiding Office and the Commission. The Staff submits that this evidence is not persuasive.

It is undoubtedly true that adoption of the Trial Staff's proposed adjustments will substantially reduce the increase in rates sought by the Company in this proceeding. As developed elsewhere in this brief, the Trial Staff believes that such adjustments are reasonable and should be adopted by the Presiding Officer and the Commission. What undercuts Mr. Paquette's predictions of financial disaster for the Company is the fact that these predictions are not based on any effort by the Company to match its operations to its projected income: that is to reduce its expenses. When asked about this on cross-examination, Mr. Pacquette admitted that the level of projected Company expenses used in his predictions were the same as contained in the initial filing (Tr. 4831-2).

The record indicates that the Company has never seriously tried to reduce its operating expenses. In the initial cross-examination on his direct testimony, Mr. Pacquette admitted that even though the Company experienced a difficult financial period in the 1970's and early 1980's, it did not take obvious steps to reduce its expenses. Even though the Company was purchasing substantial amounts of interchange power in this period, to Mr. Pacquette's knowledge no effort was made to negotiate private bilateral agreements to purchase power at less than interchange rates (Tr. 1474-76). The

Company granted general wage increases every year on August 1 during the 1970's and 1980's (Tr. 1479). Merit increases were paid to qualifying employees throughout the period and no general Company employee layoff program existed (Tr. 1479-80). No wage concessions were sought from its employees in this period and indeed, in this time of financial distress for the Company, the company's wages increased 107.7% while the GNP price deflator resulted in a 84.4% increase for the period (Tr. 1486-7, Staff Ex. 13). It is submitted that since Mr. Paquette's predictions do not contemplate any meaningful reduction of projected expenses by the Company, they simply are not meaningful or persuasive.

It must also be recognized that the Commission is under no obligation to place the interests of the Company and its shareholders over those of the ratepayers in establishing rates in this proceeding. The imprudent acts of the Company in delaying Limerick construction are certainly a factor which must be considered by the Presiding Officer and Commission in this proceeding. As explained by the Pennsylvania Supreme Court in Pennsylvania Electric Co. v. Pennsylvania Public Utility Commission, _____ Pa. _____, 502 A.2d 130 (1985), the Commission's establishment of just and reasonable rates is not designed to immunize PECO from all business risks:

> In cases where the balancing of consumer interests against the interests of investors causes rates to be set at a "just and reasonable" level which is

> insufficient to ensure the continued financial integrity of the utility, it may simply be said that the utility has encountered one of the risks that imperil any business enterprise, namely the risk of financial failure. The express language of the Hope decision weighs against regarding utilities as a protected class of business enterprises which are to be relieved of such normal business risks.

_____ Pa. _____, 502 A.2d at 134 (emphasis added).

In this case, PECO's imprudent decisions concerning Limerick construction have raised the risk of the impact of a substantial rate base disallowance for the unit. Contrary to Mr. Pacquette's assertions, this fact alone provides no basis for the Presiding Officer's and the Commission's decision in this matter.

VI. ENERGY COST RATE REVISIONS

A. After a Lengthy Investigation, the Commission Determined that PECO's ECR Should be Substantially Revised.

Modification of PECO's ECR is an issue in this proceeding solely because of the Commission's ECR #8 order, Docket Nos. P-830453, M-840775, M-FACE8408 et al, Opinion and Order entered October 30, 1985. That order was issued after an unprecedented investigation over a two-year period into the reasonableness of costs claimed by PECO pursuant to its Energy Cost Rate ("ECR"). Other issues in that proceeding were PECO's ability to effectively administer its ECR, the extent to which the company operates its generating units on a safe, economical, efficient and reliable basis and recommendations for improving future generating unit performance (Order of March 20, 1984, which initiated the expanded investigation). In its ECR #8 order, the Commission determined that over $73 million of energy costs claimed by PECO should not recovered from ratepayers:

1. Approximately $26 million of replacement power costs necessitated by a 1983 outage of Salem 1 that the Commission found had been imprudent;

2. Approximately $27 million in replacement power costs necessitated by a 1984 Salem 1 outage also found imprudent.

3. $542,750 of replacement power costs associated with an imprudent extension of a 1984 Peach Bottom II outage;

4. Approximately $2 million of replacement power costs due to the imprudent extension of the 1983 Peach Bottom III outage;

5. Approximately $2.7 million replacement power costs relating to an imprudent extension of Eddystone I outage; and

6. Approximately $15 million of claimed MgO expenses.

The Commission's concern in that proceeding was not limited to a "reactive or after the fact" investigation into the reasonableness of replacement power costs occasioned by outages of the various plants. The Commission distrusted PECO's ability to adminster its ECR; this misgiving was triggered by the fact that PECO had permitted undercollections of $100 million to occur each year for several consecutive years.

Substantial testimony was introduced into the record on that issue; the Administrative Law Judge without equivocation agreed that "PECO has been unable to effectively administer an ECR tariff. PECO's inability has forced the company's ratepayers to endure unusually large fluctuations in the ECR tariff" (R.D., p. 154). The Judge found PECO's behavior with respect to its ECR management to be so egregious he recommended that the company not be permitted to utilitze an ECR at all but to recover all energy costs through base rates (R.D., p. 154; finding #16; ordering paragraph #5).

The Commission in its order agreed with the Administrative Law Judge that PECO was not effectively

administering its ECR. (Order, pp. 159-160). In the strongest possible language the Commission indicated that while it felt complete elimination of the ECR was too extreme a measure, it intended to take a significant action which would provide sufficient incentive for PECO to change its conduct in the future:

> ...We do believe that to proceed with "business as usual" with regard to PECO's ECR would result in a grave injustice to the Company's ratepayers.
>
> We have previously stated that the present ECR mechanism provides no specific incentive for an electric utility to improve its generating plant performance.
>
> * * *
>
> Our resolution of the issues in this proceeding regarding the outages at the various generating plants and our determination of the issues concerning recovery of replacement power costs, of necessity, represent a reactive or "after the fact" investigation of PECO's management of its energy generation. Our new modification of the ECR mechanism for PECO represents an initial movement to an active stance by this Commission regarding the establishment and efficient operation of the ECR mechanism.
>
> * * *
>
> Although mindful of this on-going generic investigation of the ECR mechanism, we cannot ignore the immediate need to change the ECR mechanism, presently in effect for PECO.

Opinion and Order, pp. 160-62.

Clearly, the Commission felt that there was a serious problem with PECO's handling of its ECR, and that is why it took the unusual step of ordering a partial abolition of the ECR. The issue in this proceeding is the manner in which the ECR revision ordered by the Commission will be implemented.

B. Staff's ECR Proposal Properly Implements the Commission's Order.

1. The only reasonable interpretation of the Order requires normalization of the unreconciled energy costs.

In the ruling issued on March 10, 1986 in response to Staff's Motion to Strike portions of PECO's testimony, the Administrative Law Judge recognized that the Commission had already made the determination in its ECR #8 order that PECO's ECR should be revised so that only 80% of actual experienced energy costs will be subject to reconciliation pursuant to Section 1307 of the Public Utility Code, 66 Pa. C.S. §1307. As properly noted by the Administrative Law Judge, there is primarily one major issue to be addressed in this proceeding: the accuracy and reasonableness of the company's projected energy costs. Related to this are two subsidiary issues. The first is whether the unreconciled 20% should be recovered on a normalized basis through base rates or on an actual, annualized basis in the ECR. The other issue is the appropriate tariff language and initial application of the revised ECR.

With respect to the first issue, it is the company's position that the 20% unreconciled portion of energy costs is to be examined annually in the ECR filings submitted by the company pursuant to the current ECR procedure; at the end of the reconciliation period, 80% of the experienced variation in energy costs would be recovered (Tr. 4551-52; PECO Stmt. 18F). The company's counsel admitted on the record that this position is based on PECO's interpretation of the ECR #8 order (Tr. 2249).

Based on the language contained in the ECR #8 order, as well as the circumstances surrounding the order it is Staff's position that the only proper and reasonable way to implement the order is by normalizing the 20% of energy costs and including them in base rates. There are numerous reasons why this is so.

First, normalization is consistent with the Commission's order. The order states at pp. 163 and 164:

> Upon investigation [in the current base rate proceeding] of the ECR filing and accompanying data by the Commission, and after hearings thereon and approval by the Commission of the ECR, the Company will commence recovery of the energy costs included in said approved ECR on a levelized monthly basis, beginning with the calendar month following issuance of a final Order of the Commission in the Company's current rate filing and any subsequent general rate filing.19/
> (emphasis supplied)

In addition, the Commission directed PECO to provide historic and 3-year projected operating data with

respect to both its own units and historic performance data relating to comparable generating units operated by other utilities. The Commission also directed the company to supply similar data "to provide such full support for its expected energy costs in all future general rate filings" (p. 163, emphasis supplied).

The company's position entirely ignores these repeated references to subsequent or future general filings.

The suggestion that the unreconciled energy costs are to be recovered through the ECR is not only unsupported by express language in the order, but it flies in the face of common sense. PECO witness Hill agreed that the order requires projected energy costs to be examined in general rate proceedings (Tr. 4551); these projections also would be included in the annual ECR filings (Tr. 4551). This statement alone shows how illogical the company's proposal is. It simply is beyond belief that the Commission would create such a burdensome, duplicative procedure, especially in light of the Commission's knowledge of the frequency of PECO's general rate filings. Mr. Hill described the investigation by the Commission of PECO's projected energy costs as "It could be a review by the Commission Staff, various bureaus. It could be an investigation with a hearing process much like the base rate proceedings." (Tr. 4559). In fact, it was this same witness who in his rebuttal testimony criticized Staff's proposal because, he says, "the company

would have to prepare and the Commission would have to review, two separate forecasts of its energy costs -- In my view, this is a needless and unnecessary duplication of effort by the company and Commission." This is exactly the result that would occur if the company's interpretation of the ECR #8 order is adopted.

As explained by Staff witness Rosenthal:

> At page 3 of PECO Stmt. 18F witness Hill misinterprets the Commission's use of the phrase "subsequent Commission proceedings." The Commission's current energy clause procedures do not include before the fact energy cost proceedings. Only after the fact reconciliation (Section 1307(e)) proceeding occurs without a special Commission Order directing investigation of specific energy areas. Of course, the Commission can initiate an investigation into any area it deems appropriate. The question at hand is whether in its ECR #8 order the Commission has indicated it wishes to burden itself with annual energy cost hearings to support energy cost projections. The order at p. 163 states that PECO has been "directed to provide such full support for its expected energy costs in all future general rate filings." Under the Company's proposal, the Commission would have hearings for the ECRF annually and again every time (since January 1979, averaging every 15 months) the Company elects to file a rate request. It should be obvious that this was not the Commission's intent.

Staff Stmt. ECR-2, pp. 2-3.

Staff respectfully suggests that the reason PECO is proposing that the energy cost projections be examined in the context of its ECR filing is obvious. The company knows that the ECR process is not designed to examine the reasonableness of these projections in any detail prior to the

effective date of the ECR. First, there is only one month between the filing of the proposed ECR and the final ECR; this compares with the statutory nine-month period set for general rate proceedings. Next, because all jurisdictional electric utilities file their ECRs on the same day, there simply is not available sufficient Commission resources to perform any type of substantial review. The fact is that, except in one case involving unique circumstances, the Commission has never suspended for investigation projected ECR costs; certainly for PECO in the last six years no such investigation has been initiated by the Commission (Tr. 4551), despite the Commission's finding in its ECR #8 order that PECO has been unable to accurately and reasonably project its energy costs.

The Commonwealth Court described the Section 1307 procedure in National Fuel Gas Distribution Corp. v. Pennsylvania Public Utility Commission, 81 Pa. Commonwealth Ct. 148, 473 A.2d 1109 (1984):

> As the Supreme Court explained in Allegheny Ludlum, supra, the annual inquiry of the Commission culminating in the approval or disapproval of proposed GCR customer charge revisions bears little resemblance to the evidentiary exploration and analysis conducted in the usual rate case. A utility's request for a rate increase other than Section 1307 GCR charge revisions, must be supported by an exhaustive evidentiary presentation of the utility's expenses and the reasonableness thereof, the fair value of the utility's property used and useful in

public service, and the return on that value fairly to be received by companies experiencing similar economic risks. To this end public comment is solicited, numerous and lengthy public hearings are conducted, lay and expert witnesses are examined and cross-examined, and, typically, thousand of pages of documentary evidence is submitted. The duration of such proceedings is frequently measured in years.

Consideration by the Commission of proposal GCR customer charge revisions, on the other hand, is preceded only by a brief documentary submission by the utility, analysis and report by the Commission's staff as to compliance with the GCR formula and comparison of estimated gas supply costs with the estimates of similar utilities as contained in their annual GCR filings, and a hearing at which public comment is not permitted. See Allegheny Ludlum Steel Corp. v. Pennsylvania Public Utility Commission, Pa. at , 459 A.2d at 1222 (dissenting opinion of Mr. Justin Larsen). AS in the instant case, decision of the formal propriety of the GCR customer charge revision encompasses a period of only weeks. The very important sense, therefore, in which the GCR functions automatically and the central purpose of the mechanism described in Code Section 1307 is to permit the reflection in customer charges of changes in one component of a utility's cost of providing the public service without the necessity of the broad, costly, and time-consuming inquiry required in the case of rate increases generally. The traditional formal Commission approval of such GCR customer charge revisions is wholly consistent with this purpose and the "automatic" functioning of the rate adjustment mechanism.

The point to remember is that the Commission examined in great detail PECO's ability to administer its ECR; based on the substantial evidence of record produced in that investigation, the Commission concluded it was no more "business as usual" for PECO. While the Commission felt that complete elimination of PECO's ECR is "too extreme a measure to take at this time", the Commission obviously intended to send a strong signal to the Company. This is apparent from the repeated references to the ECR revision as an "incentive" to the company to improve its ECR management and cost incurrence: "In order to provide such an incentive [ie, to "improve its generating plant performance"], to PECO..." (p. 160); "the Company therefore will have an incentive to operate its generating plants in an efficient manner..." (p. 160); should provide PECO with a sufficient incentive to achieve efficient, cost effective generation and economical purchased power costs..." (p. 161); "our resolution of this matter will provide the Company with an incentive to alter its behavior and make accurate estimates of its projected energy costs..." (p. 161). (Emphasis supplied).

This theme is brought out even more vigorously later in the order. The Commission stated at p. 162 that "we cannot ignore the immediate need to change the ECR mechanism currently in effect for PECO." These many statements make it clear beyond cavil that the Commission was extremely dissatisfied with PECO's use of its ECR, and

thought it necessary to make an immediate, substantive change in order to force PECO "to alter its behavior." If the company's interpretation of the order is adopted and the unreconciled costs are annualized via the current ECR proceeding, that incentive has been greatly weakened.

In contrast, Staff's interpretation is consistent not only with the order itself but also with the motion which gave rise to the ECR 80/20% split, is reasonable and easy to administer, and is in compliance with the Public Utility Code:

1. As explained above, the order in several places states that the projected energy costs are to be examined in subsequent general rate filings. In addition, if the unreconciled portion is not normalized, then there would be no reason to require the submission of the prospective and historic data specified in the order. See, Staff Stmt. ECR-2, p. 2.

2. As explained in Staff Stmt. ECR-1, p. 3, the 80/20% split was proposed by Commissioner Shane in a Motion that was properly approved by the full Commission at public meeting - this Motion, attached to Staff Stmt. ECR-1 as Schedule 1 of Exh. ECR-1 states in several places that the unreconciled energy costs are to be recovered in base rates on a normalized basis:

> I propose that the Commission alter PECO's ECR so that 20% of its total expected energy costs be included in base rates and not be subject to reconciliation...(p. 3)

> Because the amount of projected energy costs placed in base rates... (p. 3)
>
> PECO's new rider should include the following provisions: "pursuant to the base rate proceeding, 20% of total expected energy costs shall be rolled into base rates" and "energy costs recovered through the base rates will not be subject to reconciliation..." (p. 5)
>
> That rolling 20% of the total expected energy costs into base rates should be sufficient to provide PECO with an incentive....(p. 5).

3. Since 20% are to be unreconciled, they must be charged pursuant to Section 1308 of the Public Utility Code, 66 Pa. C.S. §1308. By its express language, Section 1307 provides that any rates charged pursuant to a sliding scale of rates (ie, pursuant to §1307) must be fully reconciled. Staff Stmt. ECR1, pp. 5-6. In other words, §1307 in its current form simply does not permit partial reconciliation. Therefore, the 20% portion must be recovered via §1308. Because these costs are rolled into base rates, they should be normalized like any other unreconciliable expense.

4. If these expenses are normalized and not changed annually, the longer effective period will provide a greater degree of stability to PECO ratepayers while also providing a more effective incentive to the company to act more responsibly in its incurrence of energy costs.

5. Generally, the projected operational capacity factors included in JJC-2 are reasonable, but historical

operational capacity factors have been sub-par. While these good factors are in the normalized value, accepted by Staff, there is no guarantee that the company will continue to develop the future yearly estimates based upon the high capacity factor. Only by looking at the capacity factors in the case at bar can the Commission insure some positive improvement in company operations.

In the face of declining oil prices the company, under both methods, will retain short term gains, but the amount of gain will still be conditional on its ability to achieve expected capacity factors out of the coal and nuclear units. The incremental cost for lack of production will lessen as oil price declines. However, a longer term view must also be considered in how long will oil prices remain stable at low levels or whether they will rebound to December 1985 levels.

With the in-service of Limerick 1, the exposure of the company to oil price fluctuations is lessened. This exposure, however, will increase with the lengthy outage planned for Peach Bottom 3 in the June, 1988 time frame. Pressure for efficient maintenance management so that previously experienced management problems do not reoccur can only be exerted under the normalized method. The year-to-year method proposed by PECO will lessen controlling incentives for efficient maintenance and operation. This methodology provides no incentive for long term improvement in plant peformance, operation or cost controls.

There are two other points important to remember when evaluating the testimony presented on this issue. First, Staff's recommendations were developed and presented by Robert A. Rosenthal and Dennis P. Hosler. Mr. Hosler, as described in Staff Stmt. DPH-1, Appendix A, has extensive experience in overseeing the ECR, working with adjustment clauses not just of PECO but of all utilities. Mr. Rosenthal has been involved in virtually every major electric utility proceeding for years in a variety of areas. These witnesses' expertise in the preparation, interpretation and implementation of Commission orders cannot be disputed. After all, it is these Commission employees or their associates who will be charged with the responsibility of dealing with PECO's revised ECR. Their testimony, therefore, is entitled to a great deal of weight.

Second, Staff is compelled to address PECO's witness Hill's contention that Staff's normalized base energy cost component must be rejected because it would be "counter productive" since the company's filing incorporated a different base energy cost, and that was the basis upon which rate structure testimony was filed (PECO Stmt. 18F, pp. 5-6).

This contention is ludicrous. Simply because a particular claim is included in a rate filing does not mean that it cannot be changed. In fact, Mr. Hill on cross-examination admitted that compliance filings routinely

involve incorporation of Commission order adjustments in ECR proceedings as well as base rate proceedings (Tr. 4564). This was confirmed by Mr. Rosenthal, who noted that, "modifications are always made to the cost allocation study to comply with the Commission ordered rate-making adjustments and rate structure modifications...The proper setting of the base rate energy related revenue requirement is a necessary element for final Commission determination." (Staff Stmt. ECR-2, pp. 4-5). Frankly, in light of the fact that it took PECO 2 months to comply with the Commission's ECR #8 order so that the company's testimony was not filed until December 30, 1985 (Tr. 455) Staff is unsure when, in PECO's opinion, the Staff testimony should have been filed. In connection with Mr. HIll's rate structure comments, it should be noted that when the base cost is set higher than the actual projected energy costs (as was done by PECO in this proceeding) adverse interclass allocations are produced. The result is that high load factor and usage classes, such as Rate HT are benefitted at the expense of the residential class.

In conclusion, Staff witnesses Hosler and Rosenthal's recommendation that the unreconciled energy costs be normalized and rolled into base rates should be adopted for the following reasons:

1. It is consistent with the language in the order referring to general rate increases;

2. It is consistent with the data requirements contained in the order;

3. It is consistent with the Commission's Motion which underlies the order;

4. It is in compliance with the Public Utility Code;

5. It is reasonable and easy to administer;

6. It provides much of the incentive deemed by the Commission necessary to get PECO to "alter its behavior;" and

7. By virtue of their Commission expertise, the Staff witnesss' testimony should be accorded great weight.

The self-serving, alternative proposal advanced by the company should be rejected for the following reasons:

1. There is no support in the order;

2. It is inconsistant with Commissioner Shane's Motion;

3. It is in violation of the Public Utility Code; and

4. Would result in unnecessary and duplicative proceedings by having projected energy costs reviewed on a before the fact basis in both annual ECR filings and general rate increase proceedings.

2. Staff's proposed ECRF tariff should be adopted by the Commission.

While both the tariffs presented by Staff and PECO were in response to the Commission's order, Staff's proposed tariff should be adopted because it more directly and easily effectuates the Commission's ECR #8 order.[29/]

In their joint direct testimony, Staff witnesses Hosler and Rosenthal proposed certain suggested changes to the ECRF tariff filed by PECO. They (1) suggested that the current provision relating to interim changes be retained in the new ECR; (2) modified the definition of "E" so as to exclude PECO's proposed cap and to correctly define the reconciliation of 80% of energy costs; and (3) proposed that the definition of the "B" factor be modified to include via an "R" factor both the amount to be included as base rate recovered fuel cost and the way it is reflected in the formula. (Staff Stmt. ECR-1, pp. 7-8, Schedule 2).

First, Staff's suggested ECRF tariff specifically identifies the unreconcilable portion of energy costs as the "R" factor, and also specifies in the tariff itself the level of these unreconcilable costs (3.305 mills/Kwh). As

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29/ In light of the ruling by the Administrative Law Judge, striking all testimony relating to the $35 million cap proposed by PECO, Staff's discussion is premised on the assumption that references to the cap in PECO's tariff have been stricken.

explained in Staff Stmt. ECR-1, pp. 8-9, this new "R" factor will be used to calculate the "B" factor, which is the base rate revenue requirement energy component which will equal the normalized total energy cost used to calculate the unreconcilable 20%. The "R" factor will be determined in base rate Section 1308 proceedings in accordance with the Commission's ECR #8 order (Staff Stmt. ECR-1, p. 8).

Second, the ECRF formula developed by Staff explicitly recognizes the 80/20 split ordered by the Commission. This formula reflects the difference between collection of the normalized 80% reconcilable energy costs and 80% of the annualized energy cost projections (the "F" factor, under both Staff and the Company's proposals). Under Staff's approach, the 20% of unreconcilable costs will be recovered by applying 20% of the base rate revenue requirement (the "B" factor) used to arrive at the total base rate revenue requirement. (Staff Stmt. ECR-1, pp. 8-9).

In contrast, the company's suggested tariff does not include the 80/20 split in its ECRF formula. The only reference to the split is contained in the definition of the "E" factor reconciliation. This is confusing and would lead to misunderstandings on the part of persons not familiar with the tariff.

Third, both Staff and the company have presented differing provisions relating to interim revisions.

PECO witness Hill contested Staff's proposal concerning the tariff provision for interim tariff changes (PECO Stmt. 18F). In response to his surrebuttal testimony, Staff made a few minor revisions to the interim change provision (Staff Stmt. ECR-2, p. 9). Despite Mr. Hill's misgivings, it is Staff's position that there should be no threshold amount necessary to trigger the provision. By using the term "substantial" the Commission will be able to retain the flexibility necessary to deal with particular situations as they arise. The Commission in its Gas Cost Rate No. 5 Order, Docket Nos. M-78050055 et al (order entered March 16, 1984) expressed its preference to "retain its flexibility" with respect to interim revisions of adjustment clause rates. In addition, Staff's proposed language is consistent with the tariffs of all other jurisdictional utilities. (Staff Stmt. ECR-2, p. 6).

Another concern expressed by PECO witness Hill was the basis upon which interim revisions would be made. Staff witnesses Rosenthal and Hosler addressed this point in their surrebuttal testimony:

> Witness Hill also has stated that the Commission's Bureau of Audits "recommends that prospective changes be based upon review of the remaining months of the 1307(e) year." While this is at times a consideration used when reviewing a Company's interim rate request, the determinative factor always has been how closely the projected cost revenue level is expected to track the updated projected energy costs for the remainder of the ECR computation period.

> As was discussed at much length in the ECR #8 Investigation, merely looking at a Company's absolute over or under collection balance will not indicate how well the current ECR is matching actual cost to actual current period revenue collections. To add Witness Hill's recommended "10% of total estimated energy expenses" language to the ECRF tariff will not correct PECO's apparent continued confusion on how to properly monitor its energy clause, but will deprive the Commission of some of its flexibility.
> Staff Stmt. ECR-2, p. 7.

Support for Staff's recommendation also can be found in the ECR #8 Recommended Decision. The Commission impliedly adopted the ALJ's conclusion that:

> Staff believes and we concur that the use of the cumulative energy balance account to judge current ECR performance is a significant administrative error. Since there is no way to separate the company's recovery of current energy costs from its performance in refunding or recouping the "E" factor, the number is generally meaningless for the purpose of evaluating current ECR performance. Mr. Hill admitted that the account could show a positive number on a monthly basis at the same time the company was experiencing a monthly undercollection (Tr. 979). Further, none of the company's actions include any comparison of the projection it had made or updated to its actual performance. Since the rate is based on the company's projections, any failure to compare the projections to actual energy cost recovery produces a corresponding inability to accurately judge current performance.
> Recommended Decision, p. 157.

In addition, the company and the Staff disagree over how the interim changes are to be calculated. It is the company's position that the change is to be calculated

The Commission recognized that there is no statutory requirement that a utility must have an ECR (p. 160, fn. 16). Therefore, it is perfectly within the Commission's authority to modify or revise an ECR. In the ECR #8 investigation, the Commission was faced with overwhelming evidence that PECO had abused its ECR privilege, resulting in "grave injustice" to its ratepayers (p. 160). The Commission felt it necessary to take the extraordinary step of refusing to permit total recovery of reasonably incurred energy expenses as a means of providing an incentive to PECO to "alter its behavior." This strong incentive should not be weakened, as would be the necessary result if the company's approval is adopted.

Fourth, Staff proposes adjustment of the base energy component to reflect a more reasonable energy cost projection. The company's rates have been designed to include over $100 million in excess of the reasonable normalized or annual projected energy costs.[30/] Both

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30/ For the period ending 6/87:

(a) Company filing	(b) First year forecast actual	(c) First year forecast normalized
$589,255,897[1/]	$458,380,771	$467,688,318
Overcollections: (a)-(b)	$130,875,126	
(a)-(c)	$121,569,579	

1/ 28,298,319 MWH X $20.823/MWH.

Mr. Hill and Mr. Carroll admitted that the $207 million anticipated energy savings resulting from Limerick #1 operations over a two-year period is unrealistic and will not be achieved (Tr. 330, 4564).

As explained in Staff Stmt. ECR-2, pp. , Mr. Rosenthal had accepted the company's revised projected energy cost of 16.527 mills/Kwh as a reasonable normalized level. See, PECO Exh. JJC-2. However, Mr. Rosenthal does not believe that the level of 2-party purchases or fuel price escalation rates advanced by PECO were realistic.

After the record had been closed, PECO late-filed Exh. JJC-3 pursuant to an on-the-record data request. This exhibit was comprised of a PRODCOST run which utilized an oil price of $24 per barrel, and resulted in a projected normalized fuel cost of 16.414 mills/Kwh. Staff recommends that this cost be employed as the normalized energy cost because it is below Philadelphia coal prices, western purchase rates, PJM receipt rate and oil production rates. Thus, there is more of an incentive to optimize the lowest production source and perhaps to lock in current low prices through contracts not only in the year immediately following the conclusion of this case but in the next two years as well.

The following table demonstrates the net effect under the company's and staff's methodology using the two fuel costs projected by PECO.

Per JJC-2

	Company Year to Year Method		Staff Normalized Method	
Mills per Kwh				
Year Ended	Total Fuel Cost	20%	Total Fuel Cost	20%
6/87	16.198	3.240	16.527	3.305
6/88	17.270	3.454	16.527	3.305
6/89	16.116	3.223	16.527	3.305
Dollars				
6/87	458,380,771	91,676,154	467,606,318	93,537,264
6/88	488,823,617	97,764,723	467,789,413	93,557,883
6/89	461,720,247	92,344,049	473,486,303	94,697,261
		281,784,926		281,792,408
Net benefit to Company for 3-year period				7,482

Per JJC-3

6/87	15.859	3.172	16.414	3.283
6/88	17.270	3.454	16.414	3.283
6/89	16.116	3.223	16.414	3.283
6/87	448,780,783	89,756,157	464,488,608	92,897,722
6/88	448,823,617	97,764,723	464,590,999	92,918,200
6/89	461,720,247	92,344,049	470,248,937	94,049,787
		279,864,929		279,865,709
Net benefit to Company for 3-year period				780

In addition, the Company's base energy component is unrealistic because it has not been adjusted to reflect in base rates the energy savings associated with Salem 2. If the 3 mills/Kwh associated with this unit are removed, then PECO's base energy component would be very close to Staff's normalized 16.414 mills/Kwh.

It should be noted that the tariff language proposed by Staff should be adopted by the Commission even if the company's assertion that the unreconciled costs are to be examined and recovered on an annual basis via the ECR is accepted. Staff's tariff, regardless of the energy costs ultimately established, is reasonable and appropriate because it specifically incorporates the Commission-ordered 80/20% split while at the same time it retains for the Commission the flexibility to deal with interim revisions on a case-by-case basis.

Staff Exhibit 20, admitted into the record on January 28, 1986, is an illustration of how the proposed ECRF will operate. Staff does not represent that the fuel costs on this exhibit will occur in the near future; the exhibit was presented solely to demonstrate the effect of the 80/20% split ordered by the Commission:

ILLUSTRATIVE 80/20 ECR CALCULATIONS

Constant:

Projected energy costs:	$40M
Base portion:	$ 8M
ECR portion:	$32M
Projected sales:	200,000MWH
Rates per KWH:	
Base = 0.04¢/Kwh	
ECR = 0.16¢/Kwh	
Assumption: actual sales = projected sales	

Case I: (Projected and actual energy costs are equal)

Actual energy costs:	$40M
Base portion	$ 8M
ECR portion	$32M
Revenue	
Base @ 0.04¢/Kwh	$ 8M
Cost	(8)
ECR @ 0.16¢/Kwh	$32M
Cost	(32)

Energy costs (incurred)/overcollected	$0M
Difference to be (refunded)/recouped	0
(Cost)/Benefit to company	0

Case II: (actual energy costs are less than projected)

Actual costs:	$30M
Base portion	$ 6M
ECR portion	$24M
Revenue	
Base @ 0.04¢/Kwh	$8.0M
Cost	(6)
ECR @ 0.16¢/Kwh	$32
Cost	(24)
Energy costs over-collected	+$10M
difference to be refunded	8M
	$ 2M

Case III: (actual energy costs are greater than projected)

Actual costs:	$50M
Base portion	$10M
ECR portion	$40M
Revenue	
Base @ 0.04¢/Kwh	$8M
Cost	(10)
ECR @ 0.16¢ Kwh	$32M
Cost	(40)
Energy cost unrecovered	(10)M
Difference to be recouped	8
Cost not recovered	$ (2)M

For the reasons stated above and in Staff Stmts. ECR-1 and ECR-2, Staff respectfully submits that its proposed ECRF should be adopted by the Commission.

VII. RATE STRUCTURE

A. The Revenue Increase Should Be Allocated Uniformly in Accordance with the Costs to Provide Service.

The company's revenue increase in the instant proceeding is the largest amount ever requested by a public utility in the Commonwealth. In light of the current level of rates, and the magnitude of the requested increase, it is clear that all segments of PECO's customer base face the very real possibility of "rate shock" should the company receive all or most of its request for additional revenue. Staff, therefore, believes that it is especially important that any increase ultimately granted be distributed among the various rate classes in as uniform a manner as possible with due consideration being given the cost to provide service. The company has performed its standard four coincident peak cost of service study and has used the results of this as a guide in its proposed allocation of the increase. The company has proposed a spread of the increase which is generally across-the-board, including fuel costs. Exceptions to this are those classes found to have an indexed rate of return above 140% of the system average rate of return at present rates, for which the company is proposing a zero net increase (PECO Stmt. No. 17, pgs. 8-10 & Exhibit TPH-2, pg. A-5). In addition, the increase for the newly proposed SEPTA and AMTRAK rates would be somewhat less than the overall average in order to set these rates at the system

average rate of return initially (PECO Stmt. No. 24, pg. 11 & DR-Staff-RSA-9).

Customers in virtually every rate class have been represented by one or more intervenors. Each of the intervening parties to the proceeding has raised objections to the use of the four peak method or to certain underlying assumptions made in its employment by the company. Some parties have taken opposing positions within the same rate schedule where the interests of customers with differing usage characteristics are at odds. It thus can be seen that the rate structure proposals of the various parties are widely divergent. As each of the parties' arguments have been fully incorporated into the record they need not be repeated here. It should be noted, however, that each proposal would result in an increase for one or more classes (or groups within a class) significantly above the average increase proposed.

Although Staff recognizes that there may be certain flaws in the company's implementation of its cost of service analysis, it does not believe that they are significant enough to preclude the use of the company's proferred cost of service methodology in this proceeding. Staff, therefore, recommends that the company's four coincident peak cost of service study be accepted as an appropriate guide to be used in allocating any rate increase granted in this proceeding. Concurrently, it is recommended also that any such increase

be allocated among the rate classes proportionally to the company's allocation proposal.

VIII. CONCLUSION

Attached to this Brief are twelve tables, which represent Staff's position in this proceeding.

Staff respectfully submits that for the reasons set out in this Brief, Philadelphia Electric Company's requested rate increase of $6.71 million (net) should be denied by the Commission and the level of currently permitted revenues should be reduced by $369,000. Therefore the Company should be ordered to file new tariffs designed to produce $2,501,624,000 in annual electric base rate operating revenues.

Respectfully submitted,

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Appendix A: Detailed Explanation of Staff's Quantification Methodology

Quantification Methodology-Specific

Q. Please explain in detail your analysis:

A. Quantification of the costs associated with not meeting the April 1981 inservice date was broken down into the following categories:

I. Bechtel Costs

1) Manual Labor

a) Direct Charges

b) TO-Suspense

1) Accts. 1-8

2) Acct. 9

c) General Construction and Preventative Maintenance

2) Non Manual Labor

a) Unitized Charges

b) Non Unitized Charges

3) Materials and Sub-contracts

a) Direct Charges

b) TO-Suspense

1) Accts. 10-80

2) Acct. 90

4) Home Office

II. PECO Direct Costs

III. PECO AFUDC

Q. Please explain the method used to quantify Bechtel's Manual Labor charges.

A. The first phase of this section consisted of accumulating the project-to-date labor hours and costs as of the end of April 1981 and October

1984. Labor hours and costs were accumulated from the LD-160 ledger for the following major accounts:

XX1 - Concrete

XX2 - Civil and Architectural Work

XX3 - Reactor Pressure Vessel

XX4 - Mechanical Equipment

XX5 - Piping

XX6 - Instrumentation

XX7 - Electrical Equipment

XX8 - Electrical Bulk Materials

XX9 - Distributables

These accounts were further broken down into the following basic categories:

1) Direct Charges

2) TO Suspense Charges

3) General Construction and Preventative Maintenance Charges

Q. Please continue with a discussion of how you accumulated the project to date manual labor direct charges and associated hours as of April 1981 and October 1984.

A. First of all, direct charges are those items specifically identified in the LD-160 ledger as being related to the construction of either Units 1, 2 or the common facilities. These charges are recorded in LD-160 by Unit location and by account code. For example, the labor hours and dollars applicable to concrete work performed in Unit 1's containment area would be recorded in the ledger under 1A1, concrete work performed in Unit 2's containment area would be recorded under 2A1, and concrete work performed in Common Facilities radwaste area

would be recorded under 9C1 (See Ex. DPD-5). The accumulation process merely consisted then of identifying and scheduling all direct manual labor hours and costs by location and account code. Exhibit DPD-6 reflects the accumulation of all LD-160 concrete labor hours and costs directly charged to Unit 1 as of the end of April 1981 and October 1984. The manual labor costs directly charged to Units 1, 2 and Common as of April 1981 and October 1984 were as follows:

	October 30, 1984	April 29, 1981
Unit 1	$232,250,910	$ 81,087,904
Unit 2	42,955,809	23,407,541
Common	98,450,718	42,649,544
TOTAL	$373,657,437	$147,144,989

The $373,657,437 represents 57.9% of the total Bechtel manual labor charges applicable to Units 1, 2 and Common as of October 30, 1984.

Q. How did you accumulate the Unit 1, Unit 2 and Common TO Suspense manual labor hours and dollars?

A. There were two categories of TO Suspense items, those identified or already assigned in the LD-160 as being applicable to either Unit 1, 2 or Common and those not assigned to a particular facility. The Company procedure for unitizing the TO Suspense items not assigned to a particular facility in the LD-160 was as follows:

The TO Suspense dollars for each major account XX1 through XX8, unitized by cost code in the LD-160, were added to the direct manual dollars for that account. Once the unitized TO items were added to the direct manual hours, the non-unitized TO items were allocated to the various facilities based on the ratio of each facility's unitized costs to the total unitized costs. Because of the tremendous number of ledger pages and individual charges to the TO accounts, we

followed the Company's procedure for the two accounts which contained the bulk of the total TO charges. These accounts TO, 5 and 8, represented 74.3% of the total charges to TO accounts 1 through 8 as of October 1984. For TO accounts 1, 2, 3, 4 and 6, we distributed the total (unitized and non-unitized) amounts recorded in the ledger based on the ratio of each facility's direct manual labor charges to the total direct manual labor charges. Staff Ex. DPD-7 illustrates both methods of unitizing TO charges recorded in accounts 1 through 8.

The remaining TO account applicable to manual labor, TO-9 Distributables, differs from TO's 1 through 8 insofar as there are no direct charges in this account. Because of this, TO-9 costs were unitized based on the ratio of each facility's unitized distributable charges plus the total manual labor charges. The Company also used this ratio as the basis for its allocation of the TO-9 distributable charges. An example of the allocation methods used for the TO-9 charges is reflected on DPD-8.

Q. Please explain how you accumulated and allocated the General Construction and Preventative Maintenance Charges as of the end of April 1981 and October 1984.

A. General Construction and Preventative Maintenance charges are designated in the LD-160 ledger by the cost code prefix of "GC" or "GP". As indicated by the Company's unitization procedures (Exh. DPD-9), these costs are all allocated to Unit 1 and Common. To accumulate these charges, it was simply a matter of scheduling the applicable summary totals from the LD-160. We then unitized these costs based on direct labor hours. These GC and GP costs represented 4.4% of the total manual labor costs as of October 1984.

Q. Please explain how you accumulated and allocated the non-manual labor costs as of October 1984 and April 1981.

A. Non-manual labor is generally designated in the LD-160 ledger by the cost code prefix N. Other prefixes used to designate non-manual labor are MO, M2, X1N and X3. Accumulation of these costs were performed by scheduling the charges in the LD-160 ledger recorded to these cost codes. These charges were accumulated by Unit 1/Common total, Unit 2 total and an unallocated total. Unit 1/Common charges were designated by cost codes ending with .1. Unit 2 charges were identified by codes ending with .2. The remaining charges were considered unallocated.

Q. How did you unitize the unallocated non-manual labor charges?

A. Unallocated non-manual labor charges were unitized to Unit 1/Common and Unit 2 based on the ratio of each of Unit 1/Common and Unit 2's portion of the total manual labor charges.

Q. How did you then allocate the total Unit 1/Common charges to each of these facilities?

A. This allocation was based on Unit 1 and Common's ratio of manual labor manhours to the combined total manhours applicable to Unit 1/Common.

Q. Please summarize how you accumulated and unitized the April 1981 and October 1984 Bechtel labor costs.

A. All Bechtel labor costs were obtained from the LD-160 ledger. The LD-160 recorded these costs as being either directly applicable to Units 1, 2 or the Common plant or else costs were placed in "suspense" to be unitized at a later time. In unitizing these "suspended" costs, we attempted to track the Company's method as closely as possible.

However, due to the immense volume of data to be scheduled and analyzed, we were unable to exactly follow the Company's unitization procedures in all instances. In these instances, however, we used procedures which approximated those employed by the Company. Staff Ex. DPD-10 compares the percentage of labor costs applicable to each facility under the Company's unitization procedures and our attempt to track such procedures. This exhibit, which reflects very little difference between the percentages, indicates that we were able to closely follow the Company's methods.

Q. Up to this point, you have discussed how you accumulated the April 1981 and October 1984 labor costs applicable to each facility. Once you had accumulated these costs, how did you go about determining the amount of labor costs associated with not meeting the 1981 in-service date?

A. Accumulation and allocation of the labor hours and costs was by far the most difficult and time consuming portion of our work. To quantify the labor costs associated with not meeting the 1981 in-service date, we developed hourly wage rates for each of the nine manual labor accounts and also for non-manual labor. These hourly wage rates were calculated based on the project-to-date labor hours and costs as of April 1981 and October 1984. The April 1981 average labor rates were then subtracted from the October 1984 rates to arrive at the experienced per hourly increase. This increase was then multiplied by the actual hours worked between April 1981 and October 1984 to arrive at the costs of labor associated with not meeting the 1981 in-service date. Exhibit DPD-11 is an example of this quantification method. Exh. DPD-12 summarizes all labor costs associated with not meeting the April 1981 in-service date.

Q. Please continue with an explanation of how you accumulated the Bechtel project to date material and subcontract costs as of April 1981 and October 1984.

A. These costs were obtained from Bechtel's Material and Subcontract Costs and Commitment Ledger, the 330R Report. The costs recorded in the 330R report are charged to ten major accounts. Within these ten major accounts are 53 subaccounts. Staff Exh. DPD-13 lists the ten major and 53 subaccounts used in the 330R report. We accumulated the costs charged to these accounts and subaccounts under the categories of direct, TO Suspense 10-80, and TO 90 - distributable charges. As in the case of labor costs, direct charges were specifically identified in the 330R as being applicable to either Unit 1, 2 or Common (Staff Exh. DPD-5). The remaining charges were not so identified and had to be allocated to the various facilities. Because of the 330R did not contain separate totals for the various categories of charges contained therein (Staff Exh. DPD-13) we were required to review approximately 2,000 ledger pages to accumulate these costs. Once these project to date material and subcontract costs as of April 1981 and October 1984 were accumulated, the non-direct charges were then allocated to the various facilities. The material and subcontract costs directly charged to Units 1, 2 and Common as of April 1981 and October 1984 were as follows:

	October 1984	April 1981
Unit 1	$120,406,734	$ 55,759,904
Unit 2	58,782,276	32,307,934
Common	109,726,308	49,163,059
TOTAL	$288,915,318	$137,230,897

The $288,915,318 represents 37.3% of the total Bechtel material and subcontract charges applicable to Units 1, 2 and Common as of October 1984.

Q. Please continue with an explanation of how you allocated TO 10-80 charges as of April 1981 and October 1984.

A. Our first step was to determine the differnece between the project to date balances of TO accounts 10 through 80 as of April 1981 and October 1984. Once this difference was determined, costs were allocated as described below:

1) TO accounts 10, 20, 50, 60 and 80 were allocated based on the unitized installed quantities per the Focus Report as of October 1984.

2) TO 30 (Nuclear Steam Supply System) was assigned completely to Unit 1 because the difference between the April 1981 and October 1984 amounts in this account was only $728,050.

3) TO accounts 40 and 70 were unitized based on the ratio of each facility's direct material and subcontract charges to the total material and subcontract charges recorded in TO accounts 40 and 70, respectively. Staff Exh. DPD-14 reflects examples of the two allocation methods. As indicated by Staff Exh. DPD-9, the Company's procedure for unitizing material and subcontract costs were much more complex and involved than the three methods described above. However, in most instances, installed quantities per the "FOCUS" report were used by the Company as the basis for unitizing TO costs. The FOCUS report's installed quantities were used by us for the majority of our TO 10-80 cost unitization. TO costs 10 through 80 represented 32.3% of the total Bechtel

materials and subcontract charges applicable to Units 1, 2 and Common as of October 1984.

Q. Please explain how you allocated the TO-90 costs to Units 1, 2 and Common?

A. The TO-90 account includes such items as Temporary Construction Facilities, Miscellaneous Construction Services, Construction Equipment and Office Equipment and Supplies. Staff Exh. DPD-13 lists all the subaccounts included in TO-90. The Company's method of unitizing the TO-90 costs is reflected on Exh. DPD-9, Section F.9. As indicated by Section F.9, certain costs are excluded from the unitization of charges to the TO-90 account. The Company, of course, does not merely forget about these charges but includes them in the unitization of distributable costs included in such items as manual and non-manual labor. These costs excluded by the Company when allocating the TO-90 charges totaled approximately $23.7 million at October 1984.

We included the $23.7 million when unitizing the TO-90 costs. Our unitization method for all TO-90 charges was based on the ratio of direct manual labor dollars determined as of October 1984. We selected this method because it closely tracked the Company's method used to unitize the majority of TO-90 costs. An example of our TO-90 cost unitization method is reflected on Exh. DPD-15.

Q. Once you had accumulated and unitized the material and subcontract costs, how did you then determine the costs of these items associated with not meeting the April 1981 in-service date.

A. As in the case of our quantification of the labor costs, our determination of material and subcontract costs resulting from not meeting

the 1981 in-service date was based on the assumption that all actual quantities of material used were reasonable.

Quantifying these costs was simply a matter of adjusting the post-April 1981 expenditures for applicable inflation factors. These inflation factors were obtained by using Table 6 of the "Producer Prices and Price Indexes" published by the U.S. Department of Labor. Staff Exh. DPD-16, 17 reflects examples of how the producer price indices were used to assign that portion of the post April 1981 costs as being applicable to not meeting the 1981 in-service date.

Q. How were you able to determine what producer price index to apply to the post April 1981 cost for all the various types of materials required to construct the Limerick project?

A. We inquired of the Company what producer price commodity codes most closely corresponded to the cost codes reflected on the Limerick Material and Subcontract Summary Code of Accounts (Exh. DPD-18). In most instances, we used the applicable commodity code supplied by the Company. For some items of material, we used codes other than those supplied to us. For example, the Company-supplied commodity code for Permanent Forms (Metal Decking) was 1079-"Prefabricated Metal Buildings." Because there was no 1079 code for April 1981, we utilized the more general code 10 - "Metal and Metal Products." Exhibit DPD-18 also reflects the producer price commodity codes used in our analysis. Two items concerning our quantification of the material and subcontract costs are important to note. First, the use of the producer price indices only approximates the increased material and subcontract costs associated with not meeting the 1981 in-service date. This is due to the fact that approximately 50,000 codes were utilized to record

Limerick costs. We did not attempt to assign producer price commodity codes to all of the Limerick cost codes but rather to only the 53 major cost codes. The second item of note regards the method used in applying the indices to the post April 1981 costs. This method consisted of comparing the applicable commodity code indices for April 1981 and October 1984. Once the difference between these two indices was determined, the calculated percentage change was then applied to the post April 1981 costs. The resulting amount, summarized by the 53 cost codes, equals the costs associated with not meeting the April 1981 in-service date.

Q. Doesn't your method assume that all post April 1981 material and subcontract costs were incurred in October 1984?

A. The use of the October 1984 indices does assume that all post April 1981 costs were incurred in October 1984. Since costs were incurred throughout the 42 month period ending October 1984, this would tend to overstate our costs quantification. On the other hand, this overstatement is offset by the assumption that all of these costs should have been spent in April 1981. In other words, the use of only the October 1984 indices, as opposed to using indices applicable to all 42 months from April 1981 through October 1984, overstates the costs quantification. Use of only the April 1981 indices versus indices applicable to each of the 42 months prior to April 1981 understates our costs quantification. Exhibit DPD-19 summarizes our costs of materials and subcontracts associated with not meeting the April 1981 in-service date.

Q. How did you accumulate and unitize the Bechtel Home Office costs?

A. These costs were obtained from Bechtel's 330R report. The 330R report records this cost in approximately 200 subaccounts. Although the Company's unitization procedures (Section D, Exhibit DPD-9) indicated that some of the charges contained in the various subaccounts were specifically identified as being applicable to either Unit 1/Common and Unit 2 the 330R ledger did not specifically identify such charges. Consequently, we were required to unitize all Home Office costs.

Q. How did you unitize the Home Office costs?

A. These costs were allocated to Unit 1/Common based on their ratio of the total Home Office costs. The total Home Office costs as of October 1984 were obtained from the Company (Exh. DPD-20), while Unit 1/Common costs were obtained from the Company's Bi-monthly Report No. 4 as submitted to the Commission. Once this allocation was made, Unit 1/Common Home Office costs were unitized to these individual facilities based on the percentages utilized by the Company in its June 30, 1984 Unitized Cost Study.

Q. Once these costs were accumulated and unitized, how did you determine the amount of Home Office costs associated with not meeting the April 1981 in-service date?

A. The quantification of the Home Office costs was based on the ratio of the total non-manual labor costs incurred after April 1981 to that portion of these costs calculated by us as being attributable to the delays. We elected to use this ratio because we assumed that the Home Office costs consisted primarily of non-manual labor charges.

Exhibit DPD-21 reflects both the unitization and cost quantification of the Home Office costs.

Q. So far you have addressed all the direct costs with the exception of the PECO directs. Please explain how you quantified the PECO direct costs associated with not meeting the 1981 in-service date?

A. The quantification of the PECO direct costs was determined in a manner similar to that used to quantify the Bechtel direct costs. Project to date PECO expenditures as of April 1981 and October 1984 were obtained from the Company's Engineering and Research Department Report (E&R Report). We accumulated these direct costs by the 56 subdivisions reflected in the E&R report, Exhibit DPD-22.

Q. Once you had accumulated the applicable PECO direct costs, how were such costs unitized?

A. The first step in the unitization process was to obtain from the Company the amount of the PECO direct costs at October 1984 applicable to Unit 1/Common and Unit 2. Based on this information, we developed percentages reflecting Unit 1/Common and Unit 2's portion of the total. We then applied these percentages to the April 1981 balance. To determine Unit 1/Common's portion of the total applicable to each one of these facilities, we applied percentages obtained from the Company. These percentages reflected Unit 1 and Common's portion of the October 1984 PECO direct cost balance. These same percentages were then used to determine the portion of the April 1981 balance applicable to Unit 1 and Common. Once this allocation was performed, the difference or the post April 1981 expenditures were determined by subtracting the April 1981 balance from the October 1984 balance. Exhibit DPD-23 is an example of this unitization method.

Q. Once you had unitized the PECO direct costs and obtained the post April 1981 expenditures, how did you determine what portion of the post April 1981 costs were associated with not meeting the 1981 in-service date?

A. The first step was to relate the post April 1981 costs per the E&R report's 56 subdivisions to each of the 14 PECO direct cost categories reflected on the Company's Bi-Monthly Reports on the status of the Limerick project as submitted to the Commission. We performed this step based on the Company's method of condensing the E&R report's work order subdivisions into the Bi-monthly Report's 14 direct cost categories (Exh. DPD-24). Quantification of these 14 cost categories was then determined based on appropriate percentages obtained as a result of our prior cost quantification. For example, the total increased cost between April 1981 and October 1984 for Unit 1 Construction Supervision was $3,970,069. We assumed this item consisted primarily of non-manual labor charges. Based on this assumption, we determined that $783,294 of the $3,970,069 was the result of not meeting the April 1981 in-service date. This determination was made as follows:

÷	Bechtel Non-manual Labor Costs Associated with not meeting 1981 in-service date	$ 30,704,382
	Total Bechtel Non-manual Labor Costs incurred between 4-81 and 10-84	$155,631,924
=	Per Cent of Total	19.73%
X	Total PECO Construction Supervision Costs Incurred between 4-81 and 10-84	$ 3,970,069
=	PECO Construction Supervision Costs Associated with not meeting 1981 in-service date	$ 783,294

Exhibit DPD-25 summarizes the cost quantification for the 14 PECO direct cost categories.

Q. You have indicated that your quantification of the costs associated with not meeting the April 1981 in-service date required you to review a tremendous number of ledger pages and in some instances, unitize costs in a manner not identical to that employed by the Company. Did you perform any verification regarding the accuracy of your numbers transcribed from the ledger pages or the reasonableness of your unitization methods?

A. We determined both the accuracy and reasonableness of our work in a number of ways. Our primary verification of the project to date totals at October 1984 was to compare our Bechtel and PECO direct costs amounts with these amounts reported to the Commission on Table C-2 of the Company's Bi-Monthly Report No. 4. Table C-2 (Exh. DPD-26) indicates that the October 1984 project to date direct cost totals for Unit 1 and Common was $2.155 billion. After compiling the project to date costs from the various ledgers, and performing the necessary unitization, our October 1984 direct cost totals for Unit 1 and Common was $2.170 billion. Our method of accumulating and unitizing the project to date costs up through October 1984 results in a difference of only $15 million or 0.07% more than that reported by the Company. In my opinion, this indicates that our cost accumulation and unitization methods were very accurate and reasonable.

Q. You stated that you verified the accuracy and reasonableness of your direct cost balances at October 1984. Did you also perform such verification for the direct costs at April 1981?

A. We were able to verify the accuracy of our accumulated costs as of April 1981. This verification was done by comparing our accumulated total costs per the LD-160 and 330R ledgers to the Bechtel labor and

material costs summarized in the April 1981 E&R report. Because there was no Company performed unitization as of April 1981, we were unable to compare our Unit 1 and Common direct cost balances with any Company generated balances. Even though this data was unavailable to us (Exh. DPD-27), I believe our methods used to unitize applicable costs as of April 1981 were reasonable. This is because the methods used for the 1981 costs were consistent with the methods employed to unitized applicable costs as of October 1984.

Q. You have explained how you quantified all the direct costs associated with not meeting the April 1981 in-service date. How was this cost quantification determined for the indirect costs of AFUDC, Overheads and Taxes?

A. As indicated in the Quantification Method-General Section, overheads and taxes were not included in our cost quantification analysis. Also included in this section. is a fairly comprehensive description of how we determined the amount of AFUDC associated with not meeting the 1981 in-service date. Rather than reiterate this description, Exhibit DPD-28 presents the actual calculations used to quantify the AFUDC costs. In regard to this Exhibit, two items should be noted. First, because we worked with actual data up through October 1984, we were able to give the Company credit for AFUDC on post April 1981 reasonable costs only up through October 1984. Assuming that a portion of the costs incurred after October 1984 were also reasonable, then our AFUDC quantification is slightly overstated. Second, when calculating the additional amount of AFUDC that would have accrued had Unit 1 and Common been completed by April 1981, we assumed that the post April 1981 reasonable costs were all spent on the first day

of each applicable six month period. This assumption results in an overstatement to our post April 1981 AFUDC credit (Exh. DPD-29). The overstatement of AFUDC applicable to the post April 1981 reasonable costs results in an understatement to our quantification of the AFUDC costs associated with not meeting the 1981 in-service date.

Q. Have you completed your explanation of the methodology used to arrive at a completion cost differential of $1,119,687,820?

A. Yes.

TABLE I

Philadelphia Electric Company
R-850152

Income Available for Return
12 Months Ended June 30, 1986
($000)

	Company Claimed Proposed Rates $	Trial Staff Adjustments $	Pro Forma Proposed Rates $	Trial Staff Recommended Disallowance $	Staff Recommended Totals $
Operating Revenues	3,183,753	19,324	3,203,077	(574,839)	2,628,238
Operating Expenses					
Operation and Maintenance	1,438,659	(49,092)	1,389,567	-	1,389,567
Depreciation and Amortization	261,383	(42,532)	218,851	-	218,851
Provision for Taxes					
Taxes Other than Income	100,899	386	101,285	(11,497)	89,788
Income Taxes	471,446	103,214	574,660	(280,361)	294,299
Deferred Income Taxes (Net)	27,437	(37,977)	(10,540)	-	(10,540)
Investment Tax Credit (Net)	(3,401)	1,308	(2,093)	-	(2,093)
Total Taxes	596,381	66,931	663,312	(291,858)	371,454
Total Operating Expenses	2,296,423	(24,693)	2,271,730	(291,858)	1,979,872
Operating Income Available for Return	887,330	44,017	931,347	(282,981)	648,366
Respondent's Original Cost Measures of Value	6,943,888		6,943,888		6,943,888
Rate of Return	12.78%		13.41%		9.34%
Staff's Original Cost Measure of Value			5,349,558		5,349,558
Rate of Return			17.41%		12.12%

TABLE IA

Philadelphia Electric Company
R-850152

Effect of ECRF Base Fuel Adjustment
12 Months Ended June 30, 1986
($000)

	Co. Pro forma Present Rates - TPH-2A	Staff Recommended Total - Table 1	Pro forma ECRF Base Fuel Adjustment	Staff Pro forma Totals	Difference from Co. Present Rates
	$	$	$	$	$
Operating Revenues	2,501,993	2,628,238	(126,614)	2,501,624	(369)
Operating Expenses	2,054,658	1,979,872	(126,614)*	1,853,258	(201,044)
Operating Income	447,335	648,366	-	648,366	201,031

*Split of ECRF Adjustment

Company Claimed Fuel Expense	20.823 mills/KWH * 28,143,062 MWH =	$586,023,980
Staff ECRF Fuel Expense	16.414 mills/KWH * 28,143,062 MWH =	$461,940,220

Fuel Expense Adjustment	($124,082,760)
Gross Receipts Tax Adjustment	(2,531,288)
Total Operating Expense	($126,614,048)

TABLE II

Philadelphia Electric Company
R-850152

Trial Staff Summary Position
Adjustments for Ratemaking Purposes
($000)

Description	Rate Base	Operating Revenues	Operating Expenses	Taxes Other than Income	State Income Tax	Federal Income Tax	Effect on Income
	$	$	$	$	$	$	$
Annualization of Power Plant Outage Exp. (Staff Stmt DPH-1)	-	-	(5,494)	-	383	2,351	2,760
Amortization of Salem Mgmt Evaluation (Staff Stmt DPH-1)	-	-	(3,484)	-	243	1,491	1,750
Amortization of Damaged Nuclear Fuel Assemblies (Staff Stmt DPH-1)	-	-	(104)	-	7	45	52
Wages and Benefits (Staff Stmt CTW-1)	-	-	(4,590)	-	320	1,964	2,306
Inflation Rate Adjustment (Staff Stmt CTW-1)	-	-	(6,782)	-	473	2,902	3,407
Amortization of Eddystone No. 1 (Staff Stmt CTW-1)	-	-	(1,360)	-	95	582	683
EEI-Membership Dues (Staff Stmt KIL-1)	-	-	(87)	-	6	37	44
EEI-Media Advertising (Staff Stmt KIL-1)	-	-	(272)	-	19	116	137
Customer Accounts Expense (Staff Stmt KIL-1)	-	-	(17,633)	-	1,230	7,545	8,858
Commission Investigation at C-78080459	-	-	(5,931)	-	414	2,538	2,979
Forced Outage Penalty Adjustment (Staff Stmt MJG-1)	-	19,324	-	386	1,321	8,104	9,513
CPR Audit Adjustments (Staff Stmt JPP-1)	(15,456)	-					
Decommissioning Expense (Staff Stmt MJM-1)	-	-	(3,355)	-	234	1,436	1,685
Deferred Income Taxes (Staff Stmt JMH-1)	20,437	-	-	-	(10,736)	(9,701)	20,437
Pro Forma Interest (Table IV)	-	-	-	-	6,149	37,713	(43,862)
Limerick Penalty Adj. (Staff Stmt RAR-1)	(1,536,981)	-	(42,532)	-	1,264*	8,000*	33,268
Limerick Constr. Errors (Staff Stmt MJG-1)	(13,278)	-	-	-	-	-	-
Cash Working Capital (Staff Stmt DPH-1)	(40,680)	-	-	-	-	-	-
Fuel Inventory (Staff Stmt TVP-1)	(1,561)	-	-	-	-	-	-
Salem Unit #1	(4,380)	-	-	-	-	-	-
Materials & Supplies (Staff Stmt TVP-1)	(2,431)	-	-	-	-	-	-
Total Adjustments	(1,594,330)	19,324	(91,624)	386	1,422	65,123	44,017
Company Rate Base	6,943,888						
Recommended Rate Base	5,349,558						

*Net of Deferred Income Taxes
State $3,574,000 less $2,310,000
Federal $23,230,000 less $15,230,000

TABLE III

Philadelphia Electric Company
R-850152

Measures of Value
($000)

	$
Company Claimed Original Cost Measure of Value at June 30, 1986 (Exhibit TPH-2A, Schedule A-2, Revised 2/14/86)	6,943,888
Staff Adjustments:	
Limerick Penalty	(1,536,981)
Limerick Construction Errors	(13,278)
Cash Working Capital	(40,680)
Fuel Inventory	(1,561)
Materials and Supplies	(2,431)
Deferred Income Taxes	20,437
CPR Audit Adjustments	(15,456)
Salem Unit #1	(4,380)
Staff Adjusted Measures of Value at June 30, 1986	5,349,558

Recommended Rate of Return for Staff Position

	Capital Ratio %	Cost Rate %	Weighted Cost %
Debt	50.9	10.86	5.53
Preferred	10.7	10.50	1.12
Common Equity	38.4	14.25	5.47
Total	100.0		12.12

TABLES IV

Philadelphia Electric Company
R-850152

Calculation of Income Taxes to Reflect
Interest Charges based on Staff's Adjusted
Measures of Value and Embedded Cost of Debt
($000)

	$
Actual Test Year Interest Charges (Exhibit TPH-2A, Schedule B-15)	187,595
Staff's Original Cost Measure of Value at June 30, 1986 (Table III)	5,349,558
Staff's Weighted Cost of Debt (Table III)	
Percent	5.5277%
Amount	295,707
Increase in Interest Charges Allocated to Electric Operations ($295,707 - $187,595)	108,112
Decrease in Income Taxes @ 49.76744%	(53,805)
Respondent's claimed Decrease in Income Taxes (TPH-2A, Schedule D-9, Revised 2/14/86)	(97,667)
Staff Adjustment to Income Tax Expense	43,862

TABLE V

Summary of Staff Adjustments to Cash Working Capital for the test Year Ended June 30, 1986
($000)

	Respondent(a) $	Staff Adjustments $	Staff Totals $	
Operating and Maintenance Expenses	91,954	(17,879)	74,075	(b)
Taxes	33,201	(28,013)	5,188	(c)
Interest Payments	(38,489)	5,841	(32,648)	(d)
Preferred Dividend Payment	85	(629)	(544)	(e)
Average Bank Balances	9,700		9,700	
Totals	96,451	(40,680)	55,771	

(a) Respondent's Exhibit TPH-2A, C-12, Revised 2/14/86
(b) Staff Brief, Table VI
(c) Staff Brief, Table VIII
(d) Staff Brief, Table IX
(e) Staff Brief, Table XI

TABLE VI

Staff Adjustment to Cash Working Capital
Required for Operating and Maintenance Expense for
the Test Year Ended June 30, 1986
($000)

	Dollar Days
Average Lag in Receipt of Revenue	42.3(a)
Average Lag in Payment of Operating Expenses	22.0(b)
Average Lag in Days between Receipts of Revenues and Payment of Operating Expenses	20.3
Pro Forma Test Year Operation and Maintenance Expenses	1,331,850(b)
Per Day ($1,331,850,000/365)	3,649
Requirement ($3,649,000 x 20.3)	74,075

(a) Average Lag in Receipt of Revenue, excluding the computation for Uncollectible Revenues (Exhibit TPH-2A, C-12a, Revised.)

Class of Service	Revenue	Lag Days	Revenue Days
Residential	928,292	44.7	41,494,652
Small Comm. & Ind.	359,462	44.7	16,067,951
Large Comm. & Ind.	1,174,680	39.7	46,634,796
Total	2,462,434		104,197,399

Average Revenue Lag $104,197,399/$2,462,434
(Include 15 days covering the mid-point of billing period.) 42.3

(b) Average Lag in Payment of Operating Expenses

Description	Respondent Pro Forma Expenses(*)	Staff Adjustment(**)	Staff Pro Forma Expenses	Lag Days	Lag Dollars
	$	$	$		$
Payroll	280,834	(17,306)	263,528	10.5	2,767,044
Net Interchange	224,512		224,512	35.0	7,857,920
Nuclear Fuel	136,823	(104)	136,719	46.5	6,357,433
Coal	84,660		84,660	31.2	2,641,392
Coal Freight Bills	16,766		16,766	15.0	251,490
Oil	120,360		120,360	19.3	2,322,948
Benefits	25,470	(3,656)	21,814	1.8	39,265
Pensions	29,648	(2,488)	27,160	15.0	407,400
Other Invoices	373,957	(25,538)	348,419	15.4	5,365,653
A&G Expenses & Rents	87,912		87,912	15.4	1,353,845
Total O&MS Expenses	1,380,942	(49,092)	1,331,850		29,364,390

Average Lag in Payment of Operating Expense 22.0%

*TPH-2A, C-12a, Revised 2/14/86 $1,381,755,000 and including the effect of subsequent adjustments to D-12 ($1,033,000) and D-15 $220,000.

**Staff Brief, Table VII

TABLE VII

Staff Supporting Schedule Showing the
Allocation of Expenses to Derive the Average
Lag in Payment of Operating Expenses
($000)

	$	Payroll $	Pension $	Benefits $
Payroll, Benefits, and Pensions				
Allowance of Net Employees in 1986 Budget	(4,590)			
Other Adjustments	(18,860)(a)			
Total Wage and Benefits	(23,450)			
Staff Exhibit CTW-1, Schedule 4	26.2%			
Pension and Benefits	(6,144)	(17,306)		
Ratio of Pensions to Benefits	40.5%		(2,488)	(3,656)
Other Adjustments $18,860,000(a)				
Annualization of Power Plant Outages		(5,494)		
Inflation Rate Adjustments		(6,782)		
Amortization of Eddystone No. 1		(1,360)		
Customer Accounts		(17,633)		
Commission Investigation C-78080459		(5,931)		
Total Other Adjustments Including Wages		(37,200)		
Ratio of Payroll, Benefits, and Pension ($323,849,000) to Total, Payroll, Benefits, and Pensions and Other Invoices ($315,051,000), or ($323,849,000/638,900,000).		50.7%		
Total Payroll		(18,860)(a)		
Balance for Other Invoices		(18,340)		
Amortization of Salem Mgmt Evaluation		(3,484)		
EEI-Media Advertising		(272)		
EEI-Membership Dues		(87)		
Decommissioning Expense		(3,355)		
Total Other Invoices		(25,538)		

TABLE VIII

Staff Adjustment to Cash Working Capital for Payment of Taxes for the Test Year Ended June 30, 1986
($000)

Average Lag in Receipt of Revenues	42.3(a)
Average Lag in Payment of Taxes	38.7(b)
Average Lag in Days between Receipt of Revenues and Payment of Taxes	3.6
Pro Forma Taxes	$525,861
Per Day ($525,861,000/365)	$1,441
Requirement ($1,441,000 x 3.6)	$5,188

Note (a) See Table VI
Note (b) Average Lag in Payment of Taxes, per Staff.

	Respondent Pro Forma Taxes(c) $	Staff Adjustments $	Staff Pro Forma Taxes $	Staff Disallowance(f) $	Staff Adjusted Taxes $	Lag Days	Lag Dollars $
Ad Valorum	70,336		70,336		70,336	57.2	4,023,219
Other Taxes Other than Income	164,726	386	165,112	(11,497)	153,615	(13.6)	(2,089,164)
State Income Taxes	75,199	14,468(d)	89,667	(39,303)	50,364	63.6	3,203,150
Federal Income Taxes	402,550	90,054(e)	492,604	(241,058)	251,546	60.5	15,218,533
Total	712,811	104,908	817,719	(291,858)	525,861		20,355,738

Average Lag in Days in Payment of Taxes 38.7

(c) Ex. TPH-2A, page C-12b, Revised 2/14/86.
(d) Staff Brief, Table II, $1,422,000 plus deferred taxes of $13,046,000
(e) Staff Brief, Table II, $65,123,000 plus deferred taxes of $24,931,000
(f) Staff Brief, Table I, Col. 4

TABLE IX

Staff Adjustment to Cash Working Capital
Requirement for Interest Payment Lag Offset for
the Test Year Ended June 30, 1986
($000)

Staff Rate Base at June 30, 1986	5,349,558 (a)
Percent Financed with Debt	50.9%(b)
Portion of Rate Base Financed with Debt	2,722,925
Embedded Cost of Debt	10.86%
Interest on Debt Financed Rate Base	295,710
Daily Interest ($295,710,000/365)	810.16
Net Lag Days	40.3 (c)
Working Capital Requirement	32,648

(a) Staff Brief, Table III

(b) Cost of Capital per Staff, Table III

(c) Staff Brief, Table VI, Average Lag in Receipt of Revenues 42.3

Respondent Exhibit TPH-2A, C-12c revised 2/14/86	(82.6)
Use	(40.3)

TABLE X

Staff Supporting Schedule for Interest Payment
Lag Offset for the Test Year Ended June 30, 1986
($000)

	$
Respondent's Claimed Measures of Value TPH-2A, Page A-2, Revised 2/14/86	6,943,888
Add: Respondent's CWC Interest Claim	38,489
Staff Brief, Table III, Adjustments to Measures of Value excluding CWC	(1,553,650)
Staff Brief, Table V, Adjustments to O&M Expenses (17,879) Taxes ($28,013) and Preferred Dividend ($629)	(46,521)
Measures of Value, excluding Interest Payment Lag Offset	5,382,206

$$\frac{5,382,206}{1 + (.5090 \times .1086 \times 40.3/365)}$$

$$\frac{5,382,206}{1 + (.5090 \times .1086 \times .11041)}$$

$$\frac{5,382,206}{1 + .006103} = \quad 5,349,558$$

Working Capital Requirement (32,648)

TABLE XI

Staff Adjustment to Cash Working Capital Requirement for Preferred Dividend Payment Lag Offset for the Test Year Ended June 30, 1986
($000)

	$
Staff Rate Base at June 30, 1986	5,349,558
Percent Financed by Preferred	10.7%
Portion of Rate Base Financed by Preferred	572,403
Cost of Preferred	10.50%
Dividends Allocated to Rate Base	60,102
Average Daily Dividends ($60,102/365)	164.7
Net Lag Days(a)	3.3
Decrease in Working Capital Requirement	544

(a) Lag in Payment of Dividends = 45.6
Lag in Receipt of Revenue = 42.3

Net Lag Days = 3 3

PHILADELPHIA ELECTRIC COMPANY

Docket No. R-850152

STATEMENTS (PECO)

	Statement No.	Witness	Hearing Date
PECO:			
	1	Boyer	12-17-85
	1A	"	3-13-86
	1B	"	"
	1C	"	"
	2	Kamper	12-18-85
	3	Paquette	12-20-85
	3A	"	3-14-86
	3B	"	"
	3C	"	"
	4	Clarey	12-18-85
	4A	"	3-17-86
	4B	"	"
	4C	"	"
	5	Helwig	12-18-85
	5A	"	3-13-86
	5B	"	"
	5C	"	"
	6	Sproat	12-18-85
	6A	"	3-13-86
	7	Soppett	12-18-85
	8	TBA (Madden,	12-19-86
	8A	Osborn)	3-17-86
	8B	"	"
	8C	"	"
	9	Mattson	12-17-85
	9A	"	3-14-86
	9B	"	"
	(with Exh. RJM-1)		
	10	Abrams	12-20-85
	11	Perl	12-16-85
	11A	"	3-11-86
	11B	"	"
	(with schedules)		
	12	Guth	12-17-85
	12A	"	3-11-86
	(Exh. LAG-15)		

	Statement No.	Witness	Hearing Date
PECO:	13	Hoch	12-17-85
	13A	"	3-11-86
	13B	"	"
	(Exh. WCH-1 to WCH-6)		
	14	Rush	12-16-85
	14A	"	3-11-86
	14B	"	"
	(Exh. CHR-1, 2, & 3)		
	15	Hieronymous	12-16-85
	15A	"	3-12-86
	15B	"	"
	(Exh. WHH-30 to WHH-56)		
	16	Farling	12-13-85
	16A	"	3-11-86
	16B	"	"
	17	Williams	12-13-85
			1-07-86
			1-08-86
	17A	"	3-10-96
	18	Hill	12-11-85
			12-12-85
			12-13-85
	18A	Hill	12-11-85
	18B	"	1-28-86
	18C	"	3-06-86
	18D	"	3-12-86 (moved) 3-13-86 (cross)
	18E	Hill	3-12-86 (moved) 3-13-86 (cross)
	18F	Hill	3-12-86 (moved)
	18G	Hill	3-06-86
	18H	Hill	3-12-86
	18I	Hill	3-12-86 (moved) 3-13-86 (cross)
	18J	Hill	3-12-86 (moved) 3-13-86 (cross)

	Statement No.	Witness	Hearing Date
PECO:	18K	Hill	3-13-86
	19	Solecki	12-10-85
	20	Wright	12-11-85
	20A	"	3-06-86
	20B	"	3-06-86
	21	Wroblewski	12-11-85
	21A	"	3-11-86
	21B	"	3-11-86
	22	Carroll	12-12-85
	22A	"	1-28-86
	22B	"	3-06-86
	22C	"	3-12-86
	22D (Exh. JJC-2)	"	3-12-86
	22E	"	3-06-86
	23	Sileo	12-12-85
	23A	"	3-06-86
	23B	"	3-06-86
	24	Sundemeir	1-06-86
	24A	"	3-10-86
	25	Smith	12-10-85
	25A	"	3-06-86
	25B	"	3-06-86
	26	Cotton	12-12-85
	27	McLeod	12-11-85
	28	Brennan	12-10-85
	28A	"	1-28-86
	28B (with JFB-3 & 4)	"	2-26-86
	28C	"	2-26-86
	29	Wile	12-16-85
	30	Gallagher	1-28-86
	31	Vollmer	3-14-86
	31A	"	3-14-86
	32 (Exh. PXE-1,2 & 3)	English	3-11-86

	Statement No.	Witness	Hearing Date
PECO:	33	Coughlin	3-17-86
	33A	"	3-17-86
	(with Exh. JRC-2)		
	34	Levy	3-14-86
	34A	"	"
	(with Exh. Sl-1, 2 3 & 4)		
	35	Sanders	3-14-86
	35A	"	"
	36	Clemente	3-12-86
	36A	"	"
	36B	"	"
	(Exh. FC-1 to FC-3)		
	37	Hogan	3-12-86
	37A	"	"
	(Exh. WWH-1 to WWH-7)		
	38	Schink	3-12-86
	38A	"	"

Philadelphia Electric Company

Docket No. R-850152

STATEMENTS (w/Exhibits) - Trial Staff

Staff	Statement No.	Witness	Hearing Date
	ARO-1 (Exh. ARO-1)	O'Donnell	1-22-86
	ARO-2	"	2-26-86
	CTW-1 (Exh. CTW-1)	Weakley	1-29-86
	LJ-1 (Exh. LJ-1)	Jones	1-29-86
	TVP-	Prowell	1-29-86
	MJM-1 (Exh. MJM-1A)	Mayer	1-29-86
	MJM-2 (Exh. MJM-2A)	"	3-06-86
	JMH-1 (Exh. JMH-1)	Heverling	1-29-86
	JMH-2	"	3-06-86
	DPH-1 (Exh. DPH-1)	Hosler	1-29-86
	DPH-2	"	3-06-86
	JPP-1 (Exh. JJP-1)	Prego	1-29-86
	JPP-2	"	3-06-86
	KIL-1 (Exh. KIL-1A)	Laudenslager	1-29-86
	KIL-2 (Exh. KIL-2A)	"	3-06-86
	DPD-1	Dougherty	2-06-86
	DPD-2	"	3-17-86
	MJG-1 (Exh. MJG-1)	Gruber	2-11-86
	WFH-1	Hall	2-11-86
	RAR-1 (Exh. RAR-1A)	Rosenthal	2-11-86
	RAR-2 (Exh. RAR-2A)	"	3-13-86
	ECR-1	Rosenthal/Hosler	2-26-86
	ECR-2	" "	3-12-86

Philadelphia Electric Company

Docket No. R-850152

STATEMENTS - OCA

OCA	Statement No.	Witness	Hearing Date
	1	O'Brien	2-11-86
	1A	"	"
	1B (w/Exh. JJO'B 31 & 32)	"	3-17-86
	2	Hannauer	2-07-86
	2A	"	3-17-86
	3	Rothchild	1-22-86
	3A	"	2-26-86
	4	Bleiweis	1-30-86
	4A	"	3-06-86
	5	Lanzalotta	2-14-86
	5A	"	3-11-86
	6	Komanoff	2-10-86
	6A (Exh. CK-11)	"	3-11-86
	7	Knudsen	2-06-86
	7A	"	3-11-86
	8	Oliver	2-21-86
	8A	"	3-10-86
	8B	"	3-10-86

PHILADELPHIA ELECTRIC COMPANY

Docket No. R-850152

STATEMENTS - Others

PAIEUG	Statement No.	Witness	Hearing Dates
	1	Falkenberg	2-14-86
	1A	"	3-14-86
	2	Bloom	2-19-86
	3	Pollock	2-19-86
	3A	"	3-10-86
GEC	1A	Wilson	2-13-86
	1B	"	2-13-86
	1C	"	2-26-86
	1D	"	3-12-86
	1E	"	3-12-86
OCC (Occidental)	1	Ross (direct)	2-20-86
	2	" (supplemental)	2-20-86
GSA	1	Winter	1-22-86
	2	Kelley	1-29-86
	1A	Winter surrebuttal	2-26-86
City	1	Schinnar	2-13-86
	2	Palast	2-06-86
	3	Ileo	3-10-86
	1A	Schinnar	3-12-86
	2A	Palast	3-12-86
UUC/UP	1	Chernick	2-10-86
	2	Feldman	2-21-86
	3	Wirtshafter	2-21-86
	3A	"	3-10-86
	3B	"	3-10-86
	1A	Chernick	3-11-86
	2A	Feldman	3-12-86
PFMA (Pa. Food Merchants Assn)	1	Larson	2-19-86
PBUG (Pa. Business Users' Group)	1	King	2-19-86
	2	Figley	2-19-86
	3	"	3-10-86
SEPTA/ AMTRAK	1	Rudden	2-20-86
	1A	"	3-10-86

	Statement No.	Witness	Hearing Dates
	1B	"	3-10-86
	2	Vuchic	2-20-86
CEPA	1	Grier	2-20-86
	1A	"	3-10-86
	2	Stirzinger	3-20-86

PHILADELPHIA ELECTRIC COMPANY

Docket No. R-850152

PECO Exhibits

JFB-1		12-10-85
AW-1, 2, 3		12-11-85
NMB-1		12-11-85
TPH-1, 2, 3		12-11-85
PECO Exh.	1	12-11-85
	3	12-11-85
WHH-1 to 29		12-16-85
WHH-30 to 56		3-12-86
PECO Exh.	2	12-18-85
	WFS-1	1-06-86
	RCW-1	1-07-86
	GH-1	1-28-86
	JFB-2	1-28-86
	JFB-3 & 4	3-12-86
	JJC-1	1-28-86
	JJC-2	3-12-86
PECO Exh.	4	2-06-86
	8	2-11-86
	5, 6, 7, 9	2-07-86
	10	2-11-86
	11 to 21	2-10-86
	22 to 30	2-13-86
	31 to 36	2-14-86
PECO Exh.	WCH-1 to 6	3-11-86
	CHR-1, 2 & 3	"
	PYE-1, 2 & 3	"
	WWH-4 to 7	3-12-86
	FC-1 to 3	3-12-86
	SL-1, 2, 3 & 4	3-14-86
	RJM-1	3-14-86
	VSB-1	3-17-86
	JJC-1/JRC-1	3-17-86
	JJC-2/JRC-2	3-17-86
	JJC-2 (pictures)	3-17-86

PHILADELPHIA ELECTRIC COMPANY

Docket No. R-850152

Staff Exhibits

Exhibit No.	Hearing Date
1	12-11-85
2 to 6	12-12-85
7	12-13-85
8	12-16-85
9 to 12	12-17-85
13 to 18	12-20-85
19	1-07-86
20, 21	1-28-86
22	2-10-86
23	3-06-86
24 to 36	3-11-86
37 to 40	3-14-86
41 to 42	3-17-86

With testimony:

CTW-1, LJ-1, TVP-1, MJM-1A JMH-1, DPH-1, JPP-1, KIL-1A KIL-1B	1-29-86
MJG-1, RAR-1A	2-11-886
KIL-2A, MJM-2A	3-06-86
RAR-2A	3-13-86

PHILADELPHIA ELECTRIC COMPANY

Docket No. R-850152

Exhibits (OCA)

OCA Exh.	1 to 3	12-10-85
	4 to 11	12-11-85
	12 to 23	12-12-85
	24 to 33	12-13-85
	34 to 49	12-16-85
	50 to 60	12-17-85
	61	12-18-85
	62 to 64	12-19-85
	65 to 71	12-20-85
	74 to 76	1-07-86
	77 to 85	1-08-86
	86	2-11-86
	87	2-13-86
	88	3-12-86
	89	3-17-86

PHILADELPHIA ELECTRIC COMPANY

Docket No. R-850152

Other Party Exhibits

GSA Exh.	1 to 6	12-10-85
	7 to 10	1-06-86
	11-12	1-07-86
	13	3-06-86
GEC Exh.	1	12-12-85
	2	12-13-85
	3	12-16-85
	4	12-20-85
	5 & 6	1-28-86
City Exh.	1	12-13-85
	2	2-13-86
	1-1	3-12-86
CEPA Exh.	1	1-07-86
UUC/UP Exh.	1 & 2	12-13-85
	3	12-17-85
	6	1-07-86
	7 to 12	2-14-86
	10A	3-17-86
PAIEUG Exh.	1	12-16-85
	2 to 4	1-06-86
	5 to 10	1-07-86
	11	2-14-86
	12	3-13-86
	13	3-14-86
OCC Exh.	1	1-06-86
	2	2-20-86

CERTIFICATE OF SERVICE

I hereby certify that I am, this day, serving the foregoing document(s), either by messenger or by first class mail, upon the persons addressed below:

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William E. Zeiter, Esquire
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Philadelphia, PA 19103

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Marlane R. Chestnut
Assistant Counsel
Pennsylvania Public Utility Commission

Dated: April 7, 1986

FILE IN R-850152

B-863096
B-863098
L-74

Supreme Court of Pennsylvania

Eastern District

MARLENE F. LACHMAN, ESQ.
PROTHONOTARY
PATRICK TASSOS
DEPUTY PROTHONOTARY

468 CITY HALL
PHILADELPHIA, PA 19107
(215) 560-6370

Dear Sir/Madam:

Enclosed herewith, please find a copy of the Cover Page of the Petition for Allowance of Appeal filed in that matter, with the Allocatur Docket number noted thereon.

In addition, please be advised that if you need to correspond with this office regarding this matter, please indicate the Allocatur Docket number.

Thank You.
PROTHONOTARY'S OFFICE

IN THE
SUPREME COURT OF PENNSYLVANIA
EASTERN DISTRICT

No. 435
Allocatur Docket 1988

DAVID M. BARASCH, CONSUMER ADVOCATE,
Petitioner

v.

PENNSYLVANIA PUBLIC UTILITY COMMISSION,
PHILADELPHIA ELECTRIC COMPANY,
PHILADELPHIA AREA INDUSTRIAL ENERGY USERS GROUP,
UNIVERSITY OF PENNSYLVANIA/UTILITY USERS COMMITTEE,
PENNSYLVANIA BUSINESS UTILITY USERS GROUP, USX
CORPORATION, SOUTHEASTERN PENNSYLVANIA TRANSPORTATION
AUTHORITY, NATIONAL RAILROAD PASSENGER CORPORATION,
PENNSYLVANIA FOOD MERCHANTS ASSOCIATION,
Respondents

PETITION FOR ALLOWANCE OF APPEAL

Petition for Allowance of Appeal from the Order of the Commonwealth Court of Pennsylvania at No. 2248 Commonwealth Docket 1986 and No. 2269 Commonwealth Docket 1986, entered March 31, 1988, Which Affirmed an Order of the Pennsylvania Public Utility Commission at No. R-850152, Entered June 27, 1986.

Scott J. Rubin
Assistant Consumer Advocate

Irwin A. Popowsky
Senior Assistant Consumer Advocate

David M. Barasch
Consumer Advocate

Office of Consumer Advocate
1425 Strawberry Square
Harrisburg, PA 17120
(717) 783-5048

DATED: May 2, 1988

B-863096

BP

Supreme Court of Pennsylvania

Eastern District

MARLENE F. LACHMAN, ESQ.
PROTHONOTARY
PATRICK TASSOS
DEPUTY PROTHONOTARY

468 CITY HALL
PHILADELPHIA, PA 19107
(215) 496-4600

March 8, 1989

File R-850152

Larry B. Selkowitz, Esquire
WINDOFF, REAGER, SELKOWITZ & ADLER, P.C.
127 State Street
Harrisburg, PA 17101

RE: David M. Barasch etc. v. Pa. Public Utility Commission - University of Pennsylvania/Utility Users Committee, Inc. v. Pa. Public Utility Commission - Appeals of: University of Pennsylvania/Utility Users Committee, Inc.
NO. 30 E.D. APPEAL DOCKET 1989
(Formerly No. 427 E.D. Allocatur Docket 1988)

Dear Mr. Selkowitz:

This is to advise you that the following Order has been endorsed on your Petition for Allowance of Appeal, filed in the above captioned matter:

"March 7, 1989.

Petition granted.

Per Curiam."

Accordingly, your appeal has been docketed as of **March 8, 1989** at **NO. 30 E.D. APPEAL DOCKET 1989.** You are further advised that Appellant's briefs and record are due for filing on **April 19, 1989** and Appellee's briefs must be filed within thirty (30) days after service of the briefs for Appellant.

THE COURT WILL NOT ENTERTAIN PETITIONS FOR EXTENSIONS OF TIME EXCEPT FOR THE MOST COMPELLING REASONS. Such petitions will not be accepted for filing unless received by the Prothonotary at least two (2) weeks prior to the date on which briefs are due.

Your attention is directed to Pa. R.A.P. 2111(b) which provides that copies of the lower court opinions must be appended to the Appellant's briefs. This rule will be strictly enforced and no briefs will be accepted for filing which do not comply with this requirement.

Very truly yours,

PATRICK TASSOS
Deputy Prothonotary

/pj
cc: Jack E. Jerrett, Esquire
Daniel P. Delaney, Esquire
David M. Kleppinger, Esquire
Irwin A. Popowsky, Esquire
Alan R. Squires, Esquire
Michael L. Browne, Esquire
J. Tomlinson Fort, Esquire
J. Thomas Morris, Esquire
Bernard A. Ryan, Jr., Esquire
Richard J. Munsch, Esquire
Kenneth R. Pepperney, Esquire
Roger E. Clark, Esquire
Jerry Rich

B-863096
B-863098

Supreme Court of Pennsylvania

Eastern District

MARLENE F. LACHMAN, ESQ.
PROTHONOTARY
PATRICK TASSOS
DEPUTY PROTHONOTARY

468 CITY HALL
PHILADELPHIA, PA 19107
(215) 560-6370

March 13, 1989

DOCKETED
JUL 31 1989

file R-850152

DOCUMENT FOLDER

Irwin A. Popowsky, Esquire
OFFICE OF CONSUMER ADVOCATE
1425 Strawberry Square
Harrisburg, Pa. 17120

RE: David M. Barasch, Consumer Advocate v. Pennsylvania Public Utility Commission - University of Pennsylvania/Utility Users Committee, Inc.
(Formerly No. 435 E.D. Allocatur Docket 1988)
NO. 33 E.D. APPEAL DOCKET 1989

Dear Mr. Popowsky:

This is to advise you that the following Order has been endorsed on your Petition for Allowance of Appeal, filed in the above captioned matter:

"March 7, 1989.

Petition granted.

Per Curiam".

Accordingly, your appeal has been docketed as of **March 13, 1989** at **NO. 33 E.D. APPEAL DOCKET 1989.** You are further advised that Appellant's briefs and record are due for filing on **April 24, 1989** and Appellee's briefs must be filed within thirty (30) days after service of the briefs for Appellant.

THE COURT WILL NOT ENTERTAIN PETITIONS FOR EXTENSIONS OF TIME EXCEPT FOR THE MOST COMPELLING REASONS. Such petitions will not be accepted for filing unless received by the Prothonotary at least two(2) weeks prior to the date on which briefs are due.

Your attention is directed to Pa. R.A.P. 2111(b) which provides that

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MAR 22 1989

copies of the lower court opinions must be appended to the Appellant's brief. This rule will be strictly enforced and no briefs will be accepted for filing which do not comply with this requirement.

Very truly yours,

PATRICK TASSOS
Deputy Prothonotary

/ma
cc: Jack E. Jerrett, Esquire
Daniel P. Delaney, Esquire
David M. Kleppinger, Esquire
Larry B. Selkowitz, Esquire
Alan R. Squires, Esquire
Michael L. Browne, Esquire
J. Tomlinson Fort, Esquire
J. Thomas Morris, Esquire
Bernard A. Ryan, Jr., Esquire
Richard J. Munsch, Esquire
Roger E. Clark, Esquire
Jerry Rich, Secretary - Pa. Public Utility Commission

MORGAN, LEWIS & BOCKIUS
COUNSELORS AT LAW
2000 ONE LOGAN SQUARE
PHILADELPHIA, PENNSYLVANIA 19103
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CABLE ADDRESS: MORLEBOCK
TELEX: 83-1315

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December 6, 1989

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SECRETARYS OFFICE
Public Utility Commission

Jerry Rich, Secretary
Pennsylvania Public Utility
Commission
P. O. Box 3265
Harrisburg, Pennsylvania 17120

Re: Pennsylvania Public Utility Commission
v.
Philadelphia Electric Company
Docket No. R-850152, et al.

Dear Secretary Rich:

Enclosed for filing are an original and three copies of the Joint Petition For Approval Of A Proposed Settlement Of Appellate And Remand Litigation.

As noted by the attached certificate of service, the Joint Petition has been served on all parties to the Joint Petition.

Sincerely,

David B. MacGregor /cr

David B. MacGregor

DBM:sc
enclosures
cc: All Parties to the Joint Petition

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true copy of the foregoing document upon the parties indicated below in accordance with the requirements of 52 Pa. Code §1.54.

BY FIRST CLASS MAIL

Scott J. Rubin, Esquire
Assistant Consumer Advocate
Office of Consumer Advocate
1425 Strawberry Square
Harrisburg, PA 17120

Larry B. Selkowitz, Esquire
Reager, Selkowitz & Adler
127 State Street
Harrisburg, PA 17101

David M. Kleppinger, Esquire
McNees, Wallace & Nurick
100 Pine Street
Harrisburg, PA 17108-1166

Kenneth L. Mickens, Esquire
Prosecutor
Office of Trial Staff
Pennsylvania Public Utility Commission
Room 210 North Office Building
Harrisburg, PA 17120

Carville B. Collins
Counsel for Philadelphia
Electric Company

DATED: December 6, 1989

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION, et al.	:	
	:	Docket No. R-850152, et al.
v.	:	
PHILADELPHIA ELECTRIC COMPANY	:	

JOINT PETITION FOR APPROVAL OF A PROPOSED SETTLEMENT OF APPELLATE AND REMAND LITIGATION

TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:

The Joint Petitioners, Philadelphia Electric Company ("PECO" or the "Company"), the Pennsylvania Office of Consumer Advocate ("OCA"), the University of Pennsylvania and the Utility Users Committee ("UP/UUC"), and the Philadelphia Area Industrial Energy Users Group ("PAIEUG"), hereby request the Pennsylvania Public Utility Commission (the "Commission") to approve a proposed settlement (the "Settlement") of all appellate and remand litigation arising out of the Commission's Order entered June 26, 1986 in the Limerick Nuclear Generating Station Unit 1 ("Limerick 1") Rate Proceeding, at the above-captioned docket (the "Limerick 1 Rate Order").

Under the terms of the Settlement, OCA, UP/UUC and the Commission will discontinue with prejudice all appeals pending in the Pennsylvania Supreme Court arising from the Commission's Limerick 1 Rate Order, and PECO will not attempt

to recover any additional revenues to which it may be entitled in the remand proceedings involving the Limerick 1 Rate Order as a result of the remand of part of that Order by the Pennsylvania Commonwealth Court. The Settlement is contingent upon the approval by the Commission of the Settlement and the approval by the Commission and the Presiding Administrative Law Judges in the Limerick 2 Rate Proceeding, Docket No. R-891364 (the "Limerick 2 Rate Proceeding"), of a Stipulation as to the issues which may be litigated in that Proceeding regarding the Company's 1976 and 1978 decisions to delay the in-service dates of the Limerick plant (the "Limerick 2 Rate Case Stipulation"). The effect of the Settlement is to leave intact the Limerick 1 Rate Order.

In support of the Settlement, the parties represent as follows:

Introduction

1. On June 26, 1986, the Commission entered its final Order in the Limerick 1 Rate Proceeding, granting the Company $351 million of a requested $682 million rate increase.

2. The Company appealed to the Pennsylvania Commonwealth Court the Commission's finding that the Company's decisions to delay completion of Limerick 1 in 1976 and 1978 were imprudent and the Commission's associated

$368.9 million rate base disallowance (the "Delay Decision Issues"). Docket No. 2279 C.D. 1986.

3. The OCA and UP/UUC appealed to the Pennsylvania Commonwealth Court the Commission's findings that Section 1323 of the Pennsylvania Public Utility Code, 66 Pa. C.S. §1323, was not applicable to Limerick 1, and even if Section 1323 were applicable, Limerick 1 did not constitute excess capacity (the "Excess Capacity Issues"). Docket Nos. 2248 and 2269 C.D. 1986.

4. By Opinion and Order entered March 31, 1988, the Commonwealth Court affirmed the Commission's decision on the Excess Capacity Issues, and remanded to the Commission for hearing and adjudication of the Delay Decision Issues. Barasch v. Pa. P.U.C., 115 Pa. Cmwlth. 147, 540 A.2d 966 (1988).

5. On May 2, 1988, the OCA and UP/UUC filed Petitions for Allowance of Appeal to the Pennsylvania Supreme Court on the Excess Capacity Issues. Nos. 427 and 435 E.D. Allocatur Docket 1988.

6. On April 29, 1988, the Commission filed a Petition for Allowance of Appeal to the Pennsylvania Supreme Court on the Delay Decision Issues. No. 425 E.D. Allocatur Docket 1988.

7. On March 7, 1989, the Pennsylvania Supreme Court agreed to hear the appeals by the OCA and UP/UUC on the Excess Capacity Issues (Nos. 30 and 33 E.D. Appeal Docket

1988). That Court has not yet acted on the Commission's Petition for Allowance of Appeal on the Delay Decision Issues.

8. On July 21, 1989, PECO filed for a base rate increase of approximately $549 million, at Docket No. R-891364 (the "Limerick 2 Rate Proceeding"). The principal purpose of the proposed increase is to reflect in rates the Limerick Nuclear Generating Station Unit 2 ("Limerick 2") and the second half of Limerick common plant.1/

9. In the Limerick 2 Rate Proceeding, the OCA and other parties have proposed substantial disallowances to reflect the alleged effect of the 1976 and 1978 delay decisions on the cost and schedule of Limerick 2 and the second half of Limerick common plant. PECO is contending in the Limerick 2 Rate Proceeding that: (1) the 1976 and 1978 decisions to delay the Limerick plant were prudent and reasonable; (2) the separate decisions to delay Limerick 2 in 1976 and 1978 were prudent and reasonable; and (3) the delay decisions did not increase the cost or extend the schedule of Limerick 2 and the second half of Limerick common plant. In addition, in order to preserve its rights in the pending appeals from the Limerick 1 Rate Order, PECO presented a claim to include in rate base the $368.9 million rate base disallowance associated with Delay Decision Issues.

1/ The first half of Limerick common plant was included in rate base as part of the Limerick 1 Rate Proceeding.

The Settlement

10. The Joint Petitioners hereby agree to the following Settlement subject to the conditions and contingencies set forth elsewhere in this Joint Petition:

a. The Commission will, immediately after the entry of an Order by the Commission approving the Settlement and the Limerick 2 Rate Case Stipulation, discontinue with prejudice its Petition for Allowance of Appeal to the Pennsylvania Supreme Court on the Delay Decision Issues (No. 425 E.D. Allocatur Docket 1988). Should the Pennsylvania Supreme Court grant the Commission's Petition for Allowance of Appeal before it is formally discontinued, the Commission will immediately discontinue with prejudice its appeal as to the same issues.

b. The OCA will, immediately after the entry of an Order by the Commission approving the Settlement and the Limerick 2 Rate Case Stipulation, discontinue with prejudice its appeal to the Pennsylvania Supreme Court on the Excess Capacity Issues (No. 33 E.D. Appeal Docket 1988).

c. UP/UUC will, immediately after the entry of an Order by the Commission approving the Settlement and the Limerick 2 Rate Case Stipulation, discontinue with prejudice its appeal to the Pennsylvania Supreme Court on the Excess Capacity Issues (No. 30 E.D. Appeal Docket 1988).

d. PECO will not pursue its right to a hearing and adjudication on the Delay Decision Issues

pursuant to the Commonwealth Court's remand of the Limerick 1 Rate Order, thereby foregoing any additional revenue to which it may be entitled in the Limerick 1 Rate Proceeding.

e. PECO agrees to withdraw its claim in the Limerick 2 Rate Proceeding to include in rate base the $368.9 million associated with the Delay Decision Issues.

f. The Settlement is expressly conditioned upon approval by the presiding Administrative Law Judges in the Limerick 2 Rate Proceeding and the Commission of the following Stipulation as to the issues which may be litigated in the Limerick 2 Rate Proceeding: (1) the parties to the Limerick 2 Rate Proceeding will not seek to litigate or relitigate in the Limerick 2 Rate Proceeding the prudence of the 1976 and 1978 decisions to delay the in-service date of Limerick 1 and the Commission's resulting $368.9 million rate base disallowance in the Limerick 1 Rate Proceeding; (2) the parties to the Limerick 2 Rate Proceeding may fully litigate all issues relating to the prudence of the 1976 and 1978 decisions to delay Limerick 2, and the effect, if any, of the 1976 and 1978 decisions, or any other decisions, to delay Limerick 1 and 2 on the cost and schedule of Limerick 2 and the second half of Limerick common plant, and (3) litigation in the Limerick 2 Rate Proceeding of the issues set forth in (2) above is not barred by the doctrines of res judicata or collateral estoppel. A copy of the Limerick 2 Rate Case Stipulation is attached hereto as Exhibit A.

11. The Joint Petitioners agree, and therefore submit, that granting the Joint Petition and approving the Settlement is in the public interest for the following reasons:

a. Approval of the Settlement will avoid the need for further appellate litigation regarding the Limerick 1 Rate Order, both current appeals and future appeals arising out of any Commission orders on remand, and the attendant expenditures of time, money and other resources by the Joint Petitioners and the Commission.

b. Approval of the Settlement will avoid the need to conduct remand proceedings on the Delay Decisions Issues and Excess Capacity Issues. Such remand proceedings would undoubtedly be lengthy and complex and would require substantial time and effort by the Joint Petitioners and the Commission.

c. Approval of the Settlement will eliminate any existing uncertainty as to the validity of the Commission's Limerick 1 Rate Order and avoid the possibility of refunds to or recoupment from customers of substantial revenues for prior electric service.

12. This Settlement is expressly conditioned upon the Commission approving, without modification, all the terms and conditions contained in paragraph 10 above and entry of appropriate Order regarding the same. If the Commission does not grant such approval and enter an

appropriate Order, this Settlement may be withdrawn by any Joint Petitioner fifteen days after filing with the Secretary of the Commission and serving upon the other Joint Petitioners a written Notice of Withdrawal. Withdrawal shall not be effective if, however, the Commission approves the Settlement as required herein prior to the expiration of the aforesaid notice. The Settlement is also expressly conditioned on the discontinuance of the appeals with prejudice as prescribed in paragraph 10 of this Joint Petition, and with the consent or approval of the Pennsylvania Supreme Court if such consent or approval is required.

THEREFORE, the Joint Petitioners, by their counsel respectfully request that the Commission enter an Order:

1. Granting this Joint Petition;

2. Approving this Settlement, including all the terms and conditions thereof;

3. Authorizing the Commission's Law Bureau to discontinue immediately with prejudice the Commission's Petition for Allowance of Appeal regarding the PUC's delay decision adjustment in the Limerick 1 Rate Proceeding; and

4. Approving the Limerick 2 Rate Case Stipulation referenced in paragraph 10(f) of this Joint Petition.

Respectfully submitted,

Alan L. Reed
David B. MacGregor
For Philadelphia Electric Company

Scott J. Rubin
For David M. Barasch
Consumer Advocate

Larry B. Selkowitz
For the University of Pennsylvania and Utility Users Committee

David M. Kleppinger
For Philadelphia Area Industrial Energy Users Group

Date: December 6, 1989

PENNSYLVANIA PUBLIC UTILITY COMMISSION, ET AL.

v.

PHILADELPHIA ELECTRIC COMPANY

Docket No. R-850152, et al.

EXHIBIT A

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION, et al.	:	
	:	Docket No. R-891364, et al.
v.	:	
PHILADELPHIA ELECTRIC COMPANY	:	

STIPULATION

The undersigned parties, Philadelphia Electric Company ("PECO" or the "Company"), the Office of Trial Staff ("OTS"), the Office of Consumer Advocate ("OCA") and the Philadelphia Area Industrial Energy Users Group ("PAIEUG") hereby agree to the following stipulation as to the issues which may be litigated in this proceeding regarding the Company's 1976 and 1978 decisions to delay the in-service dates of the Limerick Nuclear Generating Station ("Limerick"):

1. The parties to the Limerick 2 Rate Proceeding will not seek to litigate or relitigate in the Limerick 2 Rate Proceeding the prudence of the 1976 and 1978 decisions to delay the in-service date of Limerick 1 and the Commission's resulting $368.9 million rate base disallowance in the Limerick 1 Rate Proceeding.

2. PECO agrees to withdraw its claim in the Limerick 2 Rate Proceeding to include in rate base the $368.9 million disallowed by the Commission in the Limerick 1 Rate Proceeding, Docket No. R-850152.

3. The parties to the Limerick 2 Rate Proceeding may fully litigate all issues relating to the prudence of the 1976

and 1978 decisions to delay Limerick 2, and the effect, if any, of the 1976 and 1978 decisions, or any other decisions, to delay Limerick 1 and 2 on the cost and schedule of Limerick 2 and the second half of Limerick common plant.

4. Litigation in the Limerick 2 Rate Proceeding of the issues set forth in (3) above is not barred by the doctrines of res judicata or collateral estoppel.

Respectfully submitted,

David B. MacGregor
For Philadelphia Electric Company

Kenneth L. Mickens
For Office of Trial Staff

Scott J. Rubin
For David M. Barasch
Consumer Advocate

David M. Kleppinger
For Philadelphia Area Industrial Energy Users Group

Date: December 6, 1989

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION, et al.	:	
	:	Docket No. R-891364, et al.
v.	:	
PHILADELPHIA ELECTRIC COMPANY	:	

ORDER APPROVING STIPULATION

NOW this 6th day of December, 1989,

IT IS ORDERED:

The attached "Stipulation" is hereby approved and will be binding upon all parties to this proceeding.