

PENNSYLVANIA  
PUBLIC UTILITY COMMISSION  
Harrisburg, PA 17120

Public Meeting held October 14, 1983

Commissioners Present:

Linda C. Taliaferro, Chairman  
Michael Johnson, Dissenting and Concurring (Opinion attached)  
James H. Cawley

Pennsylvania Public Utility Commission  
United States Steel Corporation  
Bethlehem Steel Corporation  
Electralloy Corporation  
Franklin Steel Company  
Owens-Corning Fiberglass Corporation  
Walter W. Cohen, Consumer Advocate  
National Forge Company  
The Proctor & Gamble Paper Products Company  
Universal-Cyclops Specialty Steel of  
Division of Cyclops Corporation  
Ernest Fuller  
Appleton Papers, Inc.  
Brockway, Inc.  
Edward J. and Martha G. Gauly  
Hospital Council of Western Pennsylvania  
and Conemaugh Valley Memorial Hospital  
American Society of Utility Investors  
PPG Industries, Inc.  
v.  
Pennsylvania Electric Company

R-822250  
R-822250C001  
R-822250C002  
R-822250C003  
R-822250C004  
R-822250C005  
R-822250C006  
R-822250C007  
R-822250C008  
R-822250C009

R-822250C010  
R-822250C011  
R-822250C012  
C-822267

Intervenor

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OPINION AND ORDER

BY THE COMMISSION:

I. INTRODUCTION AND HISTORY OF THE CASE

On January 21, 1983, Pennsylvania Electric Company (Penelec, Respondent, or Company), a subsidiary of General Public Utilities Corporation (GPU), filed Supplement No. 20 to its Tariff Electric-Pa. P.U.C. No. 75 to become effective March 23, 1983. GPU is a holding company registered under the Public Utility Company Act of 1935. Supplement No. 20 contains proposed changes in rates, rules and regulations designed to produce an increase in annual Pennsylvania jurisdictional operating revenues of \$85.2 million,<sup>1/</sup> based upon a future test year ending September 30, 1983.<sup>2/</sup>

By order entered February 14, 1983, we noted the suspension of Supplement No. 20 by operation of law until October 23, 1983, and instituted an investigation upon our own motion at R-822250 into the lawfulness, justness, and reasonableness of existing rates as well as the rates, rules and regulations proposed in Supplement No. 20. Thereafter, Penelec filed Supplement No. 21 suspending the effective date of Supplement No. 20 until October 23, 1983.

Formal Complaints (Complaints) against the proposed rules, regulations and rates were filed by United States Steel Corporation, R-822250C001; Bethlehem Steel Corporation, R-822250C002; Electralloy Corporation, R-822250C003; Franklin Steel Company, R-822250C004; Owens-Corning Fiberglass Corporation, R-822250C005; Office of Consumer Advocate, R-822250C006; National Forge Company, R-822250C007; Proctor & Gamble Paper Products, R-822250C008; Universal-Cyclops Specialty Steel Division, R-822250C009; Ernest Fuller, R-822250C010; Appleton Paper, Inc., R-822250C011; and Brockway, Inc., R-822250C012. Penelec filed answers to each of the Complaints. Petitions to Intervene were filed on behalf of the American Society of Utility Investors, the Hospital Council of Western Pennsylvania and Conemaugh Valley Memorial Hospital, Brockway, Inc., and PPG Industries, Inc. The petitions were granted.

This matter was assigned to Administrative Law Judge Joseph P. Matuschak for hearing and a recommended decision. A prehearing conference was held on March 17, 1983, followed by fourteen days of evidentiary hearings between April 18, 1983 and June 20, 1983, when the record was

1/ In Penelec's wrap up claim, the request was effectively reduced to approximately \$74.3 million.

2/ In addition to future test year data, Penelec submitted normalized historical test year data for the twelve months ended September 30, 1982.

closed. The testimony taken resulted in approximately 1,500 pages of transcript.<sup>3/</sup>

Penelec presented its evidence through ten witnesses, together with supporting exhibits. Other parties participating in the proceeding were the Commission Trial Staff (eight witnesses), the Office of Consumer Advocate (three witnesses), Bethlehem Steel Corporation (one witness) and the Penelec Industrial Customers (one witness).<sup>4/</sup>

Main Briefs were filed by Penelec, Commission Trial Staff (Staff), the Office of Consumer Advocate, (OCA), Bethlehem Steel Corporation (Bethlehem), the American Society of Utility Investors (Investors), the Penelec Industrial Customers (Industrials), Appleton Papers, Inc. (Appleton), and the Hospital Council of Western Pennsylvania (Hospitals).<sup>5/</sup> The United States Steel Corporation indicated its support of the evidence and the Brief of Bethlehem. Reply Briefs were filed by Penelec, the Staff, the OCA, and the Society.<sup>6/</sup>

The ALJ's Recommended Decision was issued for exceptions on August 26, 1983. Exceptions were filed by Penelec, the Staff, the OCA, Bethlehem, and Appleton. Replies to Exceptions were filed by Penelec, the OCA, the Hospitals, Brockway, and Ernest Fuller.

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3/ This case was consolidated for hearing with the Met Ed rate proceeding at R-822249.

4/ The Penelec Industrial customers consist of Brockway, Inc., Electralloy Corporation, Franklin Steel Company, National Forge Company, Owens-Corning Fiberglass Corporation, The Proctor & Gamble Paper Products Company and Universal-Cyclops Corporation (hereinafter Industrials).

5/ Except for Staff, these parties' Main Briefs are joint briefs which set forth their positions on the issues in this proceeding and the Met Ed rate proceeding at R-822249.

6/ All Reply Briefs are joint briefs.

## II. RATE BASE<sup>7/</sup>

### A. FAIR VALUE

Pursuant to the provisions of 52 Pa. Code §53.51(c), Penelec chose not to submit trended original cost data in this proceeding, and submitted only original cost rate base data. At the March 17, 1983, prehearing conference all active parties to the proceeding stipulated that the fair value of the Respondent's rate base should be determined solely on the basis of the original cost measure of value. Consequently, this proceeding has been litigated by all parties on the basis that the original cost of the Respondent's electric plant, plus rate base additions and deductions, be deemed to represent the fair value of its rate base. For this reason we shall adopt as the fair value of the Respondent's rate base, the original cost measure of value as it shall be hereinafter determined. The Respondent's claimed rate base on a total company basis is \$1,099,077,000 with \$116,705,000 being applicable to investment in TMI-1 and \$982,372,000 to all other plant.

### B. ELECTRIC PLANT IN SERVICE

Penelec's claim for electric plant in service, on a total company basis, is \$1,606,864,000, with \$151,261,000 applicable to TMI-1 and \$1,455,585,000 to all other plant. No party has taken issue with this claim and finding it otherwise appropriate, the claim is approved.

### C. DEPRECIATION RESERVE

Penelec's claim for a depreciation reserve is \$471,834,000, on a total company basis, with \$22,614,000 applicable to TMI-1 and \$449,220,000 applicable to all other plant. Penelec's depreciation reserve claim is its book reserve, as distinguished from a calculated reserve.<sup>8/</sup>

In support of the appropriateness of the use of the Company's book reserve rather than the customary calculated reserve, Company witness Garland testified as follows:

Discussions have taken place on several occasions throughout the course of the last several rate proceedings between the PA PUC Prosecutory Staff and

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<sup>7/</sup> All numeric figures appearing in this Opinion and Order are stated on a total Company basis unless otherwise identified.

<sup>8/</sup> Similarly, Penelec's claim for annual depreciation expense is based upon the remaining life method rather than the whole life method.

Met-Ed and Penelec relative to the use for rate-making purposes of book reserves and remaining life accruals for Met-Ed and Penelec. We are pleased to report that, following some further discussions with the Staff in this proceeding, our understanding is that the Companies and the Staff are very close to reaching an agreement on the use of book reserves and remaining life accruals; that is, the Staff has indicated that it does not oppose our use for rate-making purposes of book reserves and remaining life depreciation rates, so long as we agree to provide for a depreciation reporting and review procedure which will permit the Commission and its Staff to monitor changes in depreciation. While we have been unable, within the time remaining in this proceeding, to focus sufficiently on the development of the specific details of such a procedure in order to enable us to reduce to writing the specifics of a reporting and tracking procedure, we do want to state for the record that the Companies are in agreement with the Staff that such a depreciation reporting and review procedure should be established and, as a measure of our intention to go forward in good faith to establish such a procedure, we offer the following: Within ninety (90) days of the date of a final Commission order in this proceeding which permits the use for ratemaking purposes of book reserves and remaining life accruals, the Companies will file for Commission approval a petition setting forth the specifics of a depreciation reporting and tracking procedure, which procedure will include an annual depreciation report in sufficient detail and with sufficient explanation to permit the Staff to monitor changes in depreciation and an appropriate mechanism to provide for recognition or changes in depreciation rates.

Tr. pp. 1471-1473.

No party to the proceeding has interposed any objection to the Respondent's proposed use of its book depreciation reserve, remaining life method of determining depreciation expense, or the remaining service lives utilized.

We conclude that, based upon the record in this proceeding, the adoption of the Respondent's book depreciation reserve, remaining life method of determining depreciation expense and the remaining service lives utilized is appropriate.

D. ADDITIONS TO RATE BASE

1. Plant Held for Future Use

The Respondent's claim is for \$6,945,635 on a total company basis, no portion of which is applicable to TMI-1. The claim is comprised of \$1,691,775 for coal reserves at Reesdale, \$4,789,434 for coal reserves at the GPU Core Drilling, and fifteen other assets totaling \$464,426.

The OCA first opposes all claims on the basis that 66 Pa. C.S. §1315, precludes the inclusion of property held for future in the rate base.

The ALJ concluded that the OCA's contention that, by reason of the provisions of 66 Pa. C.S. §1315, the Commission was precluded from including plant held for future in rate base, was without merit.

The OCA has excepted, stating only that the Respondent's claim does not meet the "used and useful" criterion as set forth in the statute.

Any consideration of the provisions of 66 Pa. C.S. §1315, must take place in the context of the past regulatory practice of this Commission. For some years it has been the Commission's practice to disallow rate base claims relating to construction work in progress, with the exception of such non-revenue producing, non-expense reducing investments as may be necessary to: (1) comply with environmental protection requirements at existing facilities; or, (2) improve safety at existing facilities. In its enactment the legislature saw fit to add another category to the Commission's exceptions, which was the investment required to convert facilities to the use of coal.

During the same period of time it had been the Commission's practice to include in rate base, plant held for future use, when: (1) there were definite plans for utilization of the property; and, (2) the utilization of such property would take place within a reasonable time (which had generally been determined to be 10 years).

In essence, the OCA is urging that the statutory provision be interpreted and applied in such a fashion as to constitute an affirmation of past Commission practice regarding construction work in progress, but, a reversal of past Commission practice with regard to plant held for future use.

We believe that it would be an unreasonable reading of the statute, to apply the definition of used and useful in such a manner as to result in a reversal of Commission practice regarding plant held for future use, in the face of legislative silence on this separate and distinct regulatory subject.

Accordingly, we conclude that the provisions of 66 Pa. C.S. §1315 do not constitute an impediment to the approval of the Respondent's claim. The exception of the OCA is, accordingly, denied.

Secondly, the OCA joins with the Staff in opposing the Reesdale and GPU Core Drilling portions of the claim (\$6,481,209), for which the Respondent has claimed in-service dates of 1993. These coal reserves are stated to be planned for use at the CoHo station or at Seward 7, which have been delayed.

In Pa. P.U.C. v. Philadelphia Electric Co., R-80061225, April 24, 1981, the Commission, in speaking regarding plant held for future use, said:

Even if we were disposed to change our policy at this time and based upon this record, our test for the inclusion of land held for future use is comprised of two criteria and shall not be modified. As stated in Pa. P.U.C. v. Pennsylvania Electric Company, R.I.D. 172 (1976);

"It is the current policy of the Pennsylvania Public Utility Commission to allow the inclusion of land held for future use in rate base (1) when definite plans are available and (2) said utilization will occur within a reasonable time. The Commission has earmarked a reasonable time in recent rate decisions as being up to ten years."

In the proceeding at Pa. P.U.C. v. Pennsylvania Electric Company, R-80051197, the Commission adopted the recommendation of the Administrative Law Judge that the Reesdale and GPU Core Drilling coal claims be rejected for lack of a specific plan. The Company attempts to cover this deficiency by now asserting that these coal reserves could be used at several of its plants and that several are strip mine reserves which could be activated quickly.

Even though the Company lists an in-service date of 1993 for the Reesdale and GPU Core Drilling reserves, the ALJ recommended rejection of these portions of the claims for lack of a definitive plan. The Company has not excepted.

We concur with the conclusion reached by the ALJ that the Reesdale and GPU Core Drilling portions of the claim should be rejected for failing to meet our traditional criterion of the existence of a definitive plan. We disallow \$6,481,209 of the Respondent's claim.

## 2. Construction Work in Progress

The Company claimed \$11,441,000 for pollution control construction work in progress. No party challenged this claim, and finding that it meets the Commission's historic criteria for inclusion in rate base, the claim is approved.

3. Cash Working Capital

The Respondent has not made a claim for a rate base allowance for cash working capital.

4. Other Working Capital

a. Materials and Supplies

Penelec's claim is for \$32,221,000. Of this amount \$6,065,000 allegedly represents materials and supplies pertaining to TMI-1 and \$26,156,000 pertains to all other plant.

The Staff position is that this claim (total claim of \$32,221,000) represents a 33% increase (over some unidentified prior period, although presumably over the recorded test year) and that there is no justification for an increase of this magnitude. The Staff witness recommended that the 13-month average ending September 30, 1982, be increased by a 1983 inflation factor of 4.35%, which would result in a total allowance of \$25,614,000, for a disallowance of \$6,607,000.

Penelec states that, by way of interrogatory responses, they disclosed that the claim is based upon an analysis of the relationship between materials and supplies inventories and the level of operations and maintenance expenditures which they support, and that the Staff made no attempt to examine that relationship.

The ALJ recommended rejection of the Staff's proposed adjustment (characterizing it as an "arbitrary application of historical data and a ball park inflation factor" (R.D., p. 24)), and finding that the proposed adjustment was defective in three respects: (1) that it failed to consider the relationship between inventories and the level of operation and maintenance expenses which they support; (2) that it assumed that the increase in materials and supplies costs follows the myriad items included in a statistical inflation index, such as eggs, bread and meat; and, (3) that "it fails to give recognition to changing and more stringent requirements in the operation and maintenance of generating power plants, and assumes static and constant conditions." (R.D., p. 25).

The OCA did not challenge the non-TMI-1 portion of the claim, but as to the TMI-1 portion, urged that, because the inventory can be used to support either or both TMI-1 and TMI-2, only one-half of the claim should be allowed.

In this regard, Penelec's witness Huff testified that the portion of these inventories related to TMI-1 could be used for both TMI-1 and TMI-2:

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9/ The figure of \$6,227,000 appearing in the the ALJ's Recommended Decision is a Pennsylvania jurisdictional figure. The appropriate total company figure is the \$6,607,000 stated.



Q. Line 13 described as other materials and supplies inventory, that claim is split between TMI-1 and other. Are any of these inventories devoted to use at TMI-2?

WITNESS HUFF: The inventory at TMI-2, it is my recollection that is for both units. . . In maximizing the amount of inventory we have to have on hand, we certainly use them for both units. It's been the contention of the Company that that generally be associated with Unit 1 because the spare parts on inventory would have to be used for Unit 1.

Q. So the TMI-2 inventories are included under the TMI-1 column?

WITNESS HUFF: The inventories for TMI-1 will be used for TMI-2 when its operational but we need them for TMI-2 [sic] also. It maximizes the sufficiency of storekeeping. [Tr. pp. 119-120]

Witness Huff further states that no only could these inventories be used for TMI-2, but would be so used:

WITNESS HUFF: No. Some of the inventories that are associated with Unit 1 could be used and would be used for Unit 2, yes.

\* \* \* \* \*

Q. All right. How is the differentiation made, then, in segregating out TMI-2 M&S opposed to inventories that could be used in both plants, was there a process that was to be used for that?

WITNESS HUFF: Inventories and supplies can be used at both units. We did not have a separate inventory nor a store house.

Q. So it was all assigned to TMI-1 for the purpose of this case?

WITNESS HUFF: Yes.  
[Tr. p. 120]

In essence, the OCA's position is that since the inventory could and would be used to support both units and TMI-2 is not being considered for rate base inclusion, the inventory should be considered to be supporting both units and allocated to TMI-1 on a 50%-50% basis.

Penelec's contention in response is that while the inventory could and would be used for TMI-2, if and when it returns to service, the inventory on hand is required to support TMI-1.

The ALJ found the testimony of the Penelec witness less than definitive on this subject and commented that there was no study supporting any possible allocation between the units or that the entire inventory would be required for TMI-1. His conclusion was that on "the basis of the record evidence, we are unable to find and conclude that the M&S established to serve both TMI-1 and TMI-2 should be allocated solely to TMI-1" (R.D., p. 28). Accordingly, he approved only 50% of the TMI-1 related claim, disallowing \$3,032,000.

Both Penelec and the Staff have excepted. The Staff position is that the ALJ approved the full 33% increase in the Company's claim (notwithstanding the disallowance which he did<sup>10/</sup> make) and argued that the claim should be further reduced by \$6,227,000.

In its exceptions Penelec asserts that the "testimony of record in this proceeding does provide the basis for its claim of \$6,065,000 for materials and supplies associated with TMI-1...." (Penelec Exceptions, p. 28). (Emphasis in original). Further, that the "testimony on this subject establishes that while these materials and supplies could be used for TMI-2, they were fully required to support TMI-1 alone." (Exceptions, p. 28).

We agree with the ALJ's conclusion that the Company's testimony on this subject leaves much to be desired with regard to clarity that the level of inventory claimed by the Company for TMI-1 is fully required for TMI-1 alone. Based upon a repeated review of the testimony, we conclude that the Company has failed to satisfy its burden of proof that the TMI-1 related inventory claim is required in its entirety to support TMI-1 and does not include a requirement for TMI-2. Therefore, we adopt the ALJ's recommendation and disallow \$3,032,000 of the TMI-1 related materials and supplies claim.

Next to be considered is the Staff's proposed adjustment. In its brief, the sole evidence to which Penelec has directed our attention in this regard, are comments elicited from Staff witness Prowell during

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<sup>10/</sup> The Staff here is using its Pennsylvania jurisdictional figure. The figure which is relevant to the ALJ's total company figure is \$6,607,000.

The Staff has made no adjustment for, or recognized that its proposed adjustment is only relevant to the the Company's claim and that it should have been appropriately reduced to recognize the ALJ's disallowance of 50% or \$3,032,000 of the TMI-1 claim.

cross-examination by Company counsel. The pertinent question and answer, is as follows:

- Q. Is it your understanding that Met-Ed's and Penelec's claim reflects or is intended to reflect the relationship between its operation and maintenance expenditures and its materials and supplies inventory?
- A. I understand that the development of a number for the M&S inventory is derived from projected operating and maintenance expenses. I think that was the answer to an interrogatory, as a matter of fact.

The Company has not directed our attention to any direct testimony by a Company witness explaining in any greater detail, the methodology employed in arriving at the estimate or attesting to its appropriateness, nor has our attention been directed to any rebuttal testimony by a Company witness, responding to the very legitimate issue raised by the Staff regarding the level of the claim, and its reasonableness, in light of the apparent large increase (33%) in the future test year level over the historic test year level. As a consequence, we must conclude that the Company has failed in its burden of proof regarding the level of its materials and supplies claim. While the Staff approach of allowing an estimated increase for the future test year, based upon an inflation factor, is, by its nature, an imprecise method, we find it to be a reasonable approach to determining an appropriate future test year allowance, in the circumstances, and fully adequate from the Company's point of view, in light of the Company's failure to carry its burden as to the full amount of its claim.

The adjustment proposed by the Staff, cannot be adopted in its entirety as urged by the Staff in its exceptions, but must be modified to recognize the ALJ's recommended disallowance of 50% of the TMI-1 related claim, which recommendation we have adopted. Appropriately corrected, to recognize the disallowance of 50%, or \$3,032,000, of the TMI-1 related claim, the Staff's proposed adjustment should be \$5,987,000.<sup>11/</sup> We shall make this additional reduction in Met Ed's claim.

Accordingly,<sup>12/</sup> the Company's exception is denied and the Staff's exception is granted.

b. Fuel Inventories

(1) Coal Inventory

The Company's original claim for coal inventory was \$26,071,000. This claim was subsequently reduced by \$2,174,000 to \$23,897,000 to

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<sup>11/</sup> Without TMI-1 in rate base the reduction is \$5,364,000.

<sup>12/</sup> With our correction and proper quantification of the proposed disallowance.

reflect a reduction in the price of the coal inventory at Homer City No. 3 from \$43.32 per ton to \$39.93 per ton. This reduction was the result of an agreement with the U.S. Environmental Protection Agency and the Pennsylvania Department of Environmental Resources, which eliminated the requirement to use high priced low-sulphur coal.

The Staff proposes that the inventory price be further reduced to \$33.41 per ton to bring the price in line with the prices at Homer City Units Nos. 1 and 2. This would result in a further reduction of \$983,000, on a total company basis.

The ALJ recommended rejection of the proposed additional adjustment, concluding that it was not supported by probative evidence, in that the sole basis proffered was to conform the claim to the inventory price at other generating stations.

The Staff has not excepted. Upon reviewing the matter we perceive no reason why the coal inventory prices at different generating stations should be necessarily expected to be identical. Viewing the testimony as a whole we conclude that the Staff has not raised a reasonable issue regarding the Company's revised claim. It is, therefore, approved.

#### (2) Strike Adjusted Coal Inventory

As contrasted with Met Ed's coal inventory claim of 45 days supply, Penelec added to its 45 day inventory level, a strike related contingency increment. The difference is an additional inventory requirement of 194,643 tons with an inventory value of \$7,650,000, which Penelec seeks to include in rate base. This portion of the claim hypothesizes a seven day work stoppage at Homer City and an assumption of no coal deliveries. The hypothesis also assumes a sixty day work stoppage by the United Mine Workers with varying assumptions regarding deliveries. The Company's hypothesis necessitates an inventory build up which then gives rise to the claim. The OCA proposed that the strike related increment of \$7,650,000 be rejected.

Most pertinently the ALJ notes that the Company witness conceded during cross-examination that the Company does not budget for this contingency (Tr. 1751). Penelec attempts to justify this claim by stating that a similar claim was approved in the proceeding at Pa. P.U.C. v. Pennsylvania Electric Co., R-80051197. However, the ALJ correctly points out that the claim was not contested in that proceeding and was not, therefore, pointedly at issue.

The ALJ also expresses the view that the ratemaking treatment sought by the Company is unjustified, particularly in light of the fact that, since the rate base allowance in the cited proceeding in April 1981, the hypothesized work stoppages have not been experienced (Tr. 178).

The ALJ recommended a disallowance of \$6,899,000, other than the \$7,650,000 proposed by the OCA, in order to reflect the Company's reduction of its overall claim in its wrap-up exhibit.

Penelec has excepted. In its exceptions Penelec makes much of the prior approval of its similar claims in the proceedings at R-80051197 and R-811602. We view those proceedings as having essentially no prece-  
dential value, in that there was no challenge to the claims in these proceedings. The Company further states:

The ALJ erroneously assumes (at page 32) that no work stoppages or strikes will take place over the next three years. There is simply no basis in the record for such an assumption, given the clear evidence of record indicating past experience with contact reopenings. (Emphasis added)

Exceptions, p. 21. We suggest to the contrary, that the ALJ has not assumed no work stoppages, but merely found the record devoid of evidentiary support for the Company's hypothesis, which is that there will be work stoppages, and, therefore, that the Company has failed to sustain its burden of proof. We reach the same conclusion. We find no probative evidence which supports the Company's claim for an incremental strike related contingency allowance in its coal inventory claim.

### (3) Oil Inventory

Both the Staff and the OCA took issue with the Company's claim for oil inventories. The Staff issue relates to the inventory levels claimed for the Wayne and Warren Stations. The OCA issue, not addressed by the ALJ in his Recommended Decision, is concerned with the price estimates used in arriving at an inventory valuation.

The Company's claim is for 300,000 gallons at the Wayne Station, priced at \$.82 per gallon, and 200,000 gallons at the Warren Station priced at \$1.043 per gallon. The claims total \$246,000 and \$208,000, respectively.

Company witness Carroll testified that the inventory claim levels represent a projected number of burn days. On cross-examination, he acknowledged, subject to check, that the monthly consumption, over a three year period, for Wayne Station was 27,000 gallons. The similar figure for the Warren Station was 149,000 gallons.

The Staff's proposed adjustment is a reduction of inventory of \$205,000 for the Wayne Station, based upon a reduced inventory level of 50,000 gallons, which in turn is based upon an average monthly consumption in 1982 of 48,000 gallons. The proffered adjustment for the Warren Station is \$187,740, based upon an inventory level of 20,000 gallons, which in turn is based upon an average monthly consumption in 1982 of 20,000 gallons.

Penelec responded that the Staff's approach totally ignores: (1) the unpredictability of the frequency and duration of the use of the Wayne and Warren combustion turbines; and, (2) the required delivery time, particularly at the Wayne Station. Penelec also argues that a

realistic inventory estimate for the Wayne Station is six 8-hour days, and for the Warren Station, four 8-hour days; both at 6,000 gallons per hour. It is clear that the Staff's proposed allowance would permit only a one day operation at Wayne and only three-plus hours operation at Warren.

Penelec also states that the Staff has overlooked the fact that oil consumption at Wayne was below normal because of turbine repairs and that consumption was well over 200,000 gallons in January, 1983.

The ALJ concluded that the Staff's method of calculating an appropriate inventory level was merely an oversimplified calculation, which was unrealistic, in that it did not consider all the circumstances, and was insufficient to insure adequate service to the public.

The ALJ recommended rejection of the Staff's proposed adjustments. The Staff has not excepted. We agree that the inventory levels which the Staff proposes to allow are unrealistically low. In the absence of any serious challenge to the levels claimed, we find that the claim is reasonable, and is approved.

The Company's total original overall oil inventory claim was for \$1,220,000. Company witness Carroll later revised this claim to \$1,419,000, which took into account reduced oil prices and an increase in the inventory claim for the Wayne Station. This revision caused the OCA witness to revise his proposed downward adjustment from \$98,000 to \$75,000.<sup>13/</sup>

OCA witness Dirmeier proposed an adjustment to the Company's claim, based upon three month averages of oil prices, which were below those estimated by the Company for September 30, 1983. As noted above the ALJ did not address the OCA's proposed adjustment in his Recommended Decision. The OCA has excepted and again urges the adoption of its proposed adjustment to the Company's claim.

In our view there are undoubtedly a variety of methods which could be employed in pricing fuel inventories. The OCA has utilized a method which differs from that employed by the Company and arrived at a different valuation than that reached by the Company, which happens to be lower. We find nothing in the record which suggests that there is any infirmity in the Company's estimate (as revised), or that the method employed by the OCA witness is necessarily more meritorious. We conclude, therefore, that no serious issue has been raised regarding the Company's claim, and, therefore, that it has carried its burden. We approve the claim and, accordingly, deny the OCA's exception.

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<sup>13/</sup> This revision implicitly accepts the Company revision to its claimed inventory level at the Wayne Station.

c. Nuclear Fuel Spare Assemblies<sup>14/</sup>

In addition to its claim of \$11,204,000 for nuclear fuel in the reactor of TMI-1, Penelec has claimed \$13,552,000 for spare nuclear fuel assemblies. This latter claim is comprised of \$2,370,000 for 26 assemblies, most of which are on site, and \$11,182,000 for an additional 100 spare assemblies in storage in Lynchburg, Virginia.

The ALJ notes that the Commission has previously approved claims for spare fuel assemblies. Pa. P.U.C. v. Pennsylvania Electric Co., 28 PUR 4th 209, 216-217 (1978).<sup>15/</sup> In the cited prior proceedings, the spare fuel assemblies were on hand as a result of a management policy decision to provide an on-site nuclear fuel inventory in the event of an emergency and also fuel management flexibility. The 26 (on-site) fuel assemblies and that portion of the claim which is for \$2,370,000 appear to fall into this category and this portion of the claim has not been opposed by either the Staff or the OCA.

The opposition voiced by the Staff and the OCA pertains to the additional 100 fuel assemblies and the related rate base claim for \$11,182,000. These 100 spare assemblies, plus a few more which have been subsequently sold to Florida Power and Light, were in the process of production at the time of the March 29, 1979 incident and their production was not halted or cancelled.

Penelec's position is that the investment decision regarding these 100 spare assemblies was prudent at the time made and that there will be a cost savings to ratepayers in the future. Penelec has also cited the Commission's decision in Pa. P.U.C. v. Philadelphia Electric Co., R-811626 (1982), wherein the Commission gave rate base recognition to investment in nuclear fuel for Limerick No. 1.

Between the extremes of total allowance or disallowance of the 100 spare assemblies, the ALJ concludes, for reasons which are not entirely clear to us, that an appropriate result is to allow 52 assemblies or the number which would be required for one full refueling, which would supply the needs for the refueling which, if performed on schedule, would take place approximately 1 year after restart. Since the balance of the spare assemblies would not be used until approximately 18 months thereafter, the ALJ apparently concluded that it would be unreasonable to burden ratepayers as much as 30 months in advance of the actual utilization of those assemblies in providing service.

Exceptions have been filed by the Respondent, the Staff, and the OCA.

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<sup>14/</sup> This rate base claim is only pertinent to TMI-1.

<sup>15/</sup> See also, Pa. P.U.C. v. Metropolitan Edison Co., 26 PUR 4th 176, 181-182 (1978).

In its exceptions, the Respondent again cites the Commission's decision in the PECO case, and points out that the claimed investments would not be included in rates until TMI-1 has returned to service, at which time, it asserts, current and future ratepayers would benefit from the guaranteed fuel supply and avoidance of more expensive spot market purchases. The Respondent concludes its comments with the request that the entire claim be allowed.

In its exceptions, the Staff states that because of slippage in restart, the first refueling may not take place until late 1984 or sometime in 1985, "which is well beyond the Company's future test year, claim." (Staff Exceptions, p. 3). The Staff also stated that this first refueling "may not take place until after the Company has requested (and possibly received) additional rate relief from the Commission." (Staff Exceptions, pp. 3-4). The Staff has not pursued or discussed the relevancy of this latter comment, and we perceive none. The Staff then cites the Commission decision in Pa. P.U.C. v. Metropolitan Edison Co., et al., I-79040308, 29 PUR 4th 502 (1979), to the effect that the term "used and useful" requires a showing that the claimed rate base investment "will be useful during a period of time in which the rates are to be in effect." (Emphasis in original) (Staff Exceptions, p. 4). Staff concludes with the assertion that the Respondent's claim should be further reduced to reflect a disallowance of all 100 spare assemblies.

In its exceptions, the OCA states that while the ALJ concluded that "the facts and legal precepts involved did not support the Companies' claims," he nevertheless allowed 52/100 of the claims. This is not precisely what we perceive him to have done. As we view the matter he rejected the entirety of the positions of all parties and adopted a middle ground. We do not believe that the OCA's characterization of the ALJ's conclusion as one in which he found that the "facts and legal precepts" did not support the Company's claim, and then that he inconsistently recommended approval of a portion of the claim, is either a fair or an accurate characterization of the substance of his conclusion and recommendation. The OCA goes on to argue the case law with regard to the criteria of used and useful and concludes with the statement that "the evidence in this case clearly establishes that none of the one hundred spare assemblies in question will be used and useful when these rates are in effect." (OCA Exceptions, p. 6)

Since TMI-1 and its related rate base components will not be considered in establishing base rates in this proceeding, we find the Staff's discussion of test year criteria and the OCA's additional comments regarding the alleged non-used and useful nature of the spare fuel assemblies, irrelevant to any decision as to whether some or all of the additional 100 spare fuel assemblies should be included in our TMI-1 related rate base determination.

In reviewing past Commission decisions regarding nuclear fuel we find that the claims have followed no consistent pattern. In addition to outright ownership, utilities have engaged in a variety of procurement methods involving advance or progress payments and leasing arrangements, whereby various carrying or capital costs have been advanced by the utility. As a consequence, no hard and fast criteria for the inclusion



of investment in nuclear fuel have been developed or appear to be capable of development. In each instance in which rate base claims for nuclear fuel has been allowed or disallowed in whole or in part, the decision has been based upon the exercise of the Commission's best judgment in the context of the peculiar facts and circumstances attendant in each proceeding. As a consequence, we find prior Commission decisions of little precedential value, including the PECO case cited by Penelec. We have previously permitted the inclusion in rate base of 26 spare fuel assemblies. While Penelec states that a refueling is contemplated approximately one year after the restart of TMI-1, the history of TMI-1, since the incident at TMI-2, has been so plagued by unanticipated occurrences of one type or another, that we can give little weight to the Company's estimate that refueling will take place approximately one year after restart. In the circumstances, we believe that it would be unreasonable on our part to further burden ratepayers by the inclusion in rate base of spare fuel assemblies, beyond the 26 spare assemblies which we have previously included in rate base, which has not been contested by any party in this proceeding. We shall therefore reject the recommendation of the Administrative Law Judge, grant the exceptions of the Staff and the OCA and disallow \$11,182,000 of the Respondent's claim. The Respondent's exception is, accordingly, denied.

#### 5. Unamortized Coal Mine Development Costs

The Company has claimed unamortized coal mine development costs of \$3,456,000. In support of this claim Penelec states that in 1969, the Commission authorized the amortization of these costs over twenty years and permitted the inclusion of the unamortized balance in rate base.

As pointed out by the ALJ, Staff witness Prowell attached a Schedule 5, to the exhibit accompanying his prepared direct testimony (Staff Statement No. 6), which reflects a complete disallowance of the Company's claim. This same disallowance is reflected in Schedule 5 of the Staff's Main Brief, which details the Staff's proposed adjustments to rate base.

What was obviously troubling to the ALJ, and troubling to us as well, is the fact that not only are the Staff's Main and Reply Briefs silent on the subject of a proposed rejection of the Company's claim, the prepared direct testimony of Staff witness Prowell is likewise silent on the subject of the adjustment reflected in Schedule 5 of his exhibit.

Understandably, the ALJ recommended approval of the Company claim in the absence of testimony from a witness supporting rejection of the claim or, alternatively, an argument in the Staff's briefs on the subject. We could speculate at some length as to a possible explanation for this situation. However, we perceive no useful purpose to be served in doing so. We find the claim to be reasonable and appropriate and it is approved.

B. DEDUCTIONS FROM RATE BASE

1. Deferred Credit for Reserve Capacity

In the prior proceeding at Pa. P.U.C. v. Pennsylvania Electric Co., R-80051197, 55 Pa. P.U.C. 31 (1981), TMI-1 and TMI-2 were not included in rate base. With regard to the subject of reserve capacity expense, an issue was raised as to whether the reserve capacity credits, applicable to the existence of TMI-1 and TMI-2, which were an integral part of the reserve capacity expense calculation, should be recognized for ratemaking purposes.<sup>16/</sup> Stated another way, the issue was as to whether the higher reserve capacity expense which would be applicable to operations without consideration of TMI-1 and TMI-2, should be allowed as an operating expense for ratemaking purposes or, alternatively, the lower actual reserve capacity expense which would be experienced because the PJM reserve capacity expense calculation recognized a credit applicable to the prior operations of TMI-1 and TMI-2. The Commission said there:

[1] The Consumer Advocate proposed an adjustment to reduce the Respondent's claimed reserve capacity relevant to the outage of TMI-1 and TMI-2. The ALJ rejected the proposed adjustment. Exceptions have been filed by the Office of Consumer Advocate. The exceptions have two aspects, first, to deny the expense claim, and second, to require normalization accounting if the expense is allowed. While the ALJ denied the Consumer Advocate proposal, it is only clear to us that he denied the proposed expense adjustment, and we agree for the reasons stated. In so doing, he only recited the amount of \$5,447,000 applicable to TMI-1 and omitted the amount of \$5,952,000 applicable to TMI-2. We deny the proposed adjustment as to both amounts.

As to the matter of normalization accounting, we believe that this is the proper accounting and ratemaking treatment to be accorded to this "hypothetical expense," and that such treatment is fully consistent with the position taken, and the commitment made, by the Respondent in its brief at p. 142 - that is,

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<sup>16/</sup> At any given point in time the PJM reserve capacity cost calculation is a lagging one. That is that at that time, although TMI-1 and TMI-2 were experiencing outages the calculation recognized a prior in service period. Similarly, it was entirely possible that at some future time when one or both plants were in service, the calculation would recognize a prior outage period.

that this expense collection will be credited against the future expense incurrence when the TMI-1 and TMI-2 outages are reflected in the Respondent's reserve capacity expenses - and we will so order.

The exceptions noted above are granted in part and denied in part.

Id: at p. 33.

In the Opinion and Order resolving those matters raised in the Company's Petition for Reconsideration in that docket, the Commission further said:

THE COMMISSION'S DECISION WITH RESPECT TO RESERVE CAPACITY

Under the PJM and GPU power pool agreements each member is either charged or credited for reserve capacity depending upon the reserve capacity of each utility. In this proceeding the Respondents' claims regarding reserve capacity costs did not reflect the credits applicable to TMI-1 and TMI-2. In the case of Metropolitan Edison Company, the amount was \$23,103,000. In the case of Pennsylvania Electric Company, the amount was \$11,390,000.

The Office of Consumer Advocate proposed an adjustment to the claimed reserve capacity costs to reflect these credits. The Administrative Law Judge rejected these proposed adjustments.

In its exceptions the Office of Consumer Advocate urged that the adjustments be adopted or alternatively, if allowed, that normalized accounting be required in order that the credits would be available in the future at such time as the outages of TMI-1 and TMI-2 were reflected in the PJM reserve capacity calculation.

We adopted the latter position. Ordering Paragraphs No. 8 of each of our final Orders entered on April 9, 1981, provided that:

The (Metropolitan Edison, Pennsylvania Electric) Company shall engage in normalized accounting for reserve capacity expenses related to the TMI-1 and TMI-2 units in accordance with generally accepted accounting principals.

This provision was designed to implement our rejection of the adjustments proposed by the Office of Consumer Advocate, which adjustments would have reduced the reserve capacity expenses claimed by the Respondents, by the applicable

credits related to the TMI-1 and TMI-2 units reflected in the Respondent's reserve capacity expenses.

Respondent's position on this subject was stated in their petition as follows:

Respondents are troubled, however, by the requirements in the orders that "Respondents utilize "normalization accounting" with respect to reserve capacity expenses ... without any clarification as to the amounts of such expenses to be normalized.

The Respondents agree that "to the extent" that the present outages give rise to future expense obligations, normalization is appropriate. However, stating that they are seeking to mitigate the future impact of the outages on reserve capacity obligations, Respondents urge that the normalization requirements contained in Ordering Paragraph No. 8 either be eliminated or modified. More specifically, the Respondents have stated:

So far as future ratemaking is concerned, Respondents made the unqualified commitment on the record that in future rate proceedings when any TMI unit is back in service and the facts about the impact, if any, of the present TMI outages upon future reserve capacity expenses are known, they "will make an appropriate corresponding normalization adjustment to eliminate any possibility of any double recovery of reserve capacity expenses."

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It is requested that the "normalization accounting" requirements of the orders either be eliminated or, in the alternative, be clarified and limited to such amounts as Respondents deem appropriate in light of the best evidence as to the amounts of Respondents' future PJM installed capacity obligations.<sup>5/</sup>

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<sup>5/</sup> Petition pages 20-21.

To the extent that either of these two proposals either envision or might result in a flow back to customers of some greater or lesser amount than is collected as an operating expense, the proposals are rejected. The commitment made by Respondents in their Brief (page 142) that they "will make an appropriate corresponding normalization adjustment to eliminate any possibility of double recovery of reserve capacity expenses," was made in a different context than

it appears above, and might be read to have a different meaning. The meaning we attributed to the statement was that collections of expenses permitted in these proceedings were to be credited or flowed back on a dollar for dollar basis. We view this subject as one solely of timing, and we agreed with the Respondent's proposal only on that basis and understanding.

It was stated in our Orders that:

[T]his expense collection will be credited against future expense incurrence where [sic] the TMI-1 and TMI-2 outages are reflected in the Respondent's reserve capacity expenses ....

The above quotation from Respondents' petition envisions a ratemaking adjustment at the time that a unit or units are back in service. To the extent that these two events might take place at different points in time, we shall not decide the timing of the credits to be made to expenses in this proceeding, but will leave such a decision for the future.

Another concern discussed by the Respondent regarding normalized accounting is that this requirement would "vitate the financial benefit of those revenues." While the language of Ordering Paragraph No. 8 speaks of "normalized accounting" and "in accordance with generally accepted accounting principals," it was not intended to control the accounting by the Respondents for financial accounting purposes. What was intended is that the Respondents should maintain appropriate records of the collection of the allowed reserve capacity expenses in question on a current basis, and in the manner and detail which would be dictated by generally accepted accounting standards.

In accordance with the foregoing discussion and clarification, the requested modification of our Orders of April 9, 1981, is granted in part and denied in part.

Pertinent to our discussion here regarding the ratemaking treatment to be accorded the normalization reserve is the fact that in the Commission's initial order the expense was characterized as "this hypothetical expense" and the Opinion and Order took the position that the monies being provided by the ratepayers over and above actual expenses would be accorded normalization accounting and returned to ratepayers." When considering the various philosophical arguments which might be raised regarding whether and/or what portions of the normalization reserve should be deducted from rate base, we find the language contained in the prior Commission orders to be consistent with the view that the funds represented by the normalization reserve are to be considered ratepayers funds, provided as a contingency against a future expense, very analogous to the Commission's historic position regarding the normalization reserve for deferred taxes resulting from accelerated

depreciation. This, however, does not provide a resolution of the precise question presented here. Among the views which we have in mind regarding whether stockholders or ratepayers have a claim, or a superior claim, to the use and benefit of those funds represented by the normalization reserve, we have in mind these possible views:

1. The capacity credits are the result of the capital investment in TMI-1 and TMI-2. TMI-1 and TMI-2 are not in rate base; ratepayers are not paying a return on those plants, and therefore, have no claim to the credits which result from the plants, but rather they are a benefit properly to be enjoyed by stockholders who are bearing the capital costs.
2. Assuming that ratepayers have a claim to the funds represented by the reserve and that they are to be returned to them as a credit to reserve capacity expense when the TMI-1 and TMI-2 outages are reflected in the PJM reserve capacity calculation, it was never the Commission's intent that the reserve be accorded rate base treatment as a deduction. This would be inconsistent with the Commission's practice of denying rate base recognition to the balances of unrecovered expenses.
3. Assuming that the ratepayers should be considered to have a claim to the benefits of the normalization reserve, the reserve should be considered to be a rate base "offset" and should only be deducted from rate base when the associated plant, i.e., TMI-1 and/or TMI-2 are included in rate base.
4. All of the above views are incorrect. Ratepayers are only properly required to bear current actual expenses as costs of service, and to the extent that ratepayers provide funds at a normalized expense level and thereby fund a reserve for future greater expenses, the ratepayers are entitled to the time value of those funds by way of interest payments or by way of a rate base deduction, regardless of whether TMI-1 or TMI-2, or both are included in or excluded from rate base.

The recommendation of the ALJ, which was to deduct that portion of the reserve applicable to TMI-1 from rate base when TMI-1 is included in rate base and to exclude that portion of the reserve from the rate base reduction when TMI-1 is excluded from rate base, is consistent with the first and third positions set forth above. However, in this regard, we must point out that while that portion of the reserve deducted from rate base in both instances, which was \$2,868,000, was identified in OCA witness Dirmeier's Statement 4, Schedule 5, as applicable to "Other" plant, it is that portion of the reserve applicable to TMI-2, as is

indicated in Penelec Exhibit B-39. We conclude that the ALJ was misled by the OCA witness' designation of this portion of the reserve as applicable to "Other" plant and would have declined to deduct these funds from rate base in both instances, had he been aware of their true character.

Penelec has excepted reiterating its prior arguments. The Staff's exceptions do not go to the merits of the ALJ's recommendation.

In addressing the subject of whether a rate base deduction by reason of the reserve for reserve capacity is appropriate, we find no significance in the Commission's silence on this subject in the prior order, because the issue had not been raised at that time and it was not ripe for decision. This issue must be decided at this time, based upon sound ratemaking principals and policy.

Each of the possible views which we have iterated above, could be argued almost endlessly and there is much to be said for each of the positions. We find no benefit to be obtained by a prolonged discussion of the pros and cons of each position. We subscribe to the view that ratepayers provided the funds represented by the reserve account and that the expense is legitimately viewed as a hypothetical expense. At the same time, the reduced expense was a result of the capital investment in the plants, the costs of which were not being borne; in their entirety, by ratepayers during the period of time when the reserve was being created. We find equities on both sides; that is, the side of the stockholders and the side of the ratepayers. We believe that those equities can be best recognized and accommodated by a conclusion that the benefit of the reserve should inure to those that are bearing its capital costs at any particular point in time. For simplicity, this view can be effectuated in this proceeding, by treating the reserve as a rate base offset. We shall, therefore, deduct that portion of the reserve applicable to TMI-1 from our rate base table which includes TMI-1 in rate base. We shall not deduct the reserve applicable to TMI-2 in any instance. The Company's exception is, accordingly, denied.

## 2. EPRI Dues

In this proceeding Penelec had initially claimed EPRI dues of \$2,075,000 as an operating expense. However, since the TMI-2 accident, Penelec has been postponing the payment of these dues, and the Company has been accruing a liability for such payments, by recording a deferred credit in Account 242.

During the course of these proceedings it became apparent that EPRI does not intend to insist upon the payment of these past obligations (Tr. 1402). Consequently, the Company deleted its expense claim of \$2,075,000, and proposed to reduce rate base by \$2,567,000, which represents the estimated reserve balance as of 9/30/83, of \$6,037,000, as reduced by deferred taxes and the estimated 1984 payment.

The OCA proposed a three year amortization of the deferred reserve balance as of 9/30/82, of \$6,766,000, as reduced by deferred taxes. The specific rate base adjustment proposed was \$2,180,000 (OCA

Statement No. 4, Schedule 4, revised) as contrasted with the reduction of \$2,567,000 proposed by the Company.

The OCA proposed an accompanying operating expense reduction, which is stated in terms of an increase in net income of \$2,175,000 (OCA Main Brief, p. 64, OCA Statement No. 4, Schedule 4, revised). This is based upon an expense reduction of \$4,330,000. Of this amount the amount of \$2,075,000, or the amount of the Company's initial test year claim, is duplicative of the expense adjustment which the Company made in its wrap-up showing in Exhibit B-138.

Additionally, the rate base reduction proposed by the OCA does not reflect any payment to EPRI from the reserve account in 1984. In our view, the reflection of the post-test year 1984 EPRI dues payment is appropriate in determining a reserve balance as of the mid-point of the two year post-test year period. This adjustment would further reduce the OCA's rate base adjustment to \$1,454,000, as contrasted with the Company's proposed reduction of \$2,567,000.

The OCA addressed the subject of the 1984 dues payment, which the Company proposed be treated as a reduction to the reserve, and suggests, in its Main Brief, page 8, that the appropriate rate making treatment would be to reflect it as a current test year expense. We do not understand this suggestion at all.

The ALJ recommended rejection of the OCA's proposals, characterizing them as engendering unnecessary confusion.

The OCA has excepted. In its exception, it again urges a rate base reduction less than that proposed by the Company, and an operating income adjustment which includes as a part thereof, the test year expense adjustment which it elsewhere acknowledges that the Company has eliminated. The OCA has, apparently, not yet recognized the error in its witness' calculation. We have closely examined the balance of the OCA's exception and find no merit in it. The distinction between the OCA's proposal and that of the Company is so minor, that the differentiation as to appropriate rate making principles merely constitutes a distinction without a difference. We adopt the rate base and expense claim adjustment proposed by the Company and recommended to us by the ALJ. The OCA's exception is denied.

#### F. CONCLUSION

As a result of our adoption and rejection of various proposed adjustments to the Respondent's claim, as discussed above, we adopt as our fair value rate base the figure of \$963,628,000, excluding TMI-1.



### III. OPERATING REVENUES

The Company claims total operating revenues of \$690,202,000 under the proposed rates. The only challenge to Penelec's proposed operating revenues, as adjusted, is with respect to the proposed normalization of future test year sales to customers served under rates GP and LP (Staff St. 2). Penelec's position is that its proposed normalization adjustments are reasonable, supported by substantial evidence, and should be accepted (PN St. C, pp. 2-7; PN Exh. C-2 and C-3).

#### A. GP & LP Sales Level

Penelec has claimed adjusted levels of sales of 1,504,546 MWH for Rate GP and 1,814,061 MWH for Rate LP. The Company submits that its proposed normalization adjustments are reasonable, supported by substantial evidence, and should be accepted (Id.).

The Staff proposed an adjustment for Rates GP and LP to reflect a normalized level of 1,765,959 MWH for Rate GP and a normalized level of 2,373,217 MWH for Rate LP (Staff St. 2, p. 3; Staff Exh. 2, Sch. 1 and Sch. 3). The Staff proposal represents an average of the actual sales to Rates GP and LP for the 12 month periods ending September 30, 1981 and 1982. Staff witness Yocca considers that this adjusted level represents a "more normal" sales level than does Penelec's adjusted figures (Staff St. 2, p. 2).

The Staff notes that Penelec's adjusted future test year level of sales for Rate GP is 13% below the actual historic test year level and 21.8% below sales for the year ended September 30, 1983, and that Rate LP is 28.2% level below the 1981 level and 33.4% below the historic test year sales. The Staff's normalization of Penelec's GP and LP sales level is based upon the theory that:

For ratemaking purposes, sales levels are typically normalized for factors which cannot be accurately predicated, e.g., weather and economic conditions. Just as sales to weather sensitive customers are normalized to average-out the impact of extreme weather conditions, sales to customers which are more sensitive to economic factors must also be normalized. . . .

(Id.). In Order to reflect its normalization of Penelec's low sales levels of Rate GP and Rate LP, the Staff recommends that revenues be increased by \$28,319,000 (and expenses be decreased by \$13,129,000 to reflect fuel costs associated with the revenue adjustment).

Although the Staff admits that Penelec's actual, future test year GP and LP, sales are approximately at the adjusted levels claimed by the Company, it urges that, for ratemaking purposes, "sales levels should be examined for what is normal after adjusting for known changes." (Staff Main Brief, p. 37).

Penelec witness Carter stated that the purpose for the GP and LP normalization was to provide an accurate estimate of the sales level expected to be experienced during the time in which the rates would be in effect, which, in the case of Penelec he expected would be for about a one-year period. He stated that in preparing the sales normalization in general and in particular for Rates GP and LP for Penelec:

I utilize all the available sources of data as far as economic indicators; analyses of the company's budget as far as sales that are expected in that forecast, take into account change, permanent changes and temporary changes, of a short term nature that would impact that percent of time when we expect to have the rates in effect.

Tr. 1303.

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The facts as they were incorporated in the original 1983 forecast used as a beginning point in this normalization process were that an expected recovery would well be underway in the fourth quarter of 1982. And that recovery would continue in to 1983, with some degree of vigor.

Subsequent results, which all of us have access to through reading of normal -- for instance, Business Week or any economic journal and I'm not familiar with all of them, obviously, but I normally see some of these results coming through from our economic group of forecasters, indicate that those forecast of economic indicators prepared in the Spring of 1982 were fairly colored by people wearing rose colored glasses.

In other words, they were optimistic. So as we prepared to normalize the rate case sales for Penelec, we had opportunity to take advantage of the passage of time, and not only did we have the first three months of actual results for the future test year that we presented in this case, but we also had been tracking the forecast for several months prior to that.

Tr. 1305.

In recommending the rejection of the Staff's proposal to impute additional revenues to Penelec's future test year data, the ALJ presented a lengthy discussion on the issue, which was as follows:

A. No, I haven't.

Q. Have you, in fact, ever talked with any of the Penelec customers served under those rates concerning their usage?

A. No, I haven't.

Tr. 1260.

Mr. Yocca did not even reflect any of Penelec's data comparing actual to forecast sales for the test year in his adjustment. His sole support for his "law of average" calculation is his bold assertion that his unstudied, mechanical mathematical average figures are more in line with "normal expectations" of Rates GP and LP sales than the Company has proposed, but has provided no analysis whatever to support his conclusions.

Penelec's Exhibit C-34 depicts the actual MWH sales to the GP and LP customers for the first eight months of the future test year. It shows that the GP customers utilized approximately 125,000 MWH each month. Mr. Carter testified that the maximum monthly use since 1981 was 155,000 MWH. To achieve the MWH sales suggested by Mr. Yocca, GP customers would have to operate, for the remaining four months of the test year, at a level of operation 25 percent greater than the monthly maximum since 1981, and 50 percent higher than the monthly use experienced in the first eight months of the test year.

Penelec's Exhibit C-34 shows that during the first eight months of the test year, LP customers used approximately 166,000 MWH per month. In order to achieve the level of MWH sales suggested by Mr. Yocca, LP customers, in the next four months remaining in the test year, would have to operate at a level of 261,000 MWH per month, or 60 percent greater than their average use so far in the test year.

This Commission, in its ratemaking process, cannot be oblivious of present and most recently projected economic conditions. In addition to the record evidence, the Commission, in its regulatory responsibility, may take administrative notice of the obvious. To accept Staff's recommendation to impute its proposed additional GP and LP revenues would be to depart from all reality.

We must reject the recommendation of Commission Trial Staff to impute additional revenues to Penelec's future test year data,

While we have accepted, in some instances herein, the use of the averaging process, as the best available evidence, because other record evidence did not adequately provide a basis for a valid finding, even those instances were tempered by the inclusion of the future test year data in the averaging process to provide for growth or improvement.

In doing so, however, we do not accept the sole or indiscriminate use of the averaging procedure as the proper tool in the ratemaking process. Such simplistic procedure, though it may be convenient, may be inadequate; ratemaking involves more complex analysis. Where factual evidence is available, the averaging process may be of little or no value. As this Commission said in *Duquesne Light Company v. Pa. P.U.C.*, 107 A.2d 745, 753 (1954):

"Load growth adjustment of commercial and industrial sales based [upon] factual detailed studies are far better than the assumed law of averages calculations applied to all classes of sales by City."

In this connection, the averaging process utilized by Staff witness Yocca, under the circumstances, is absolutely inappropriate.

Commission Trial Staff's evidence is unpersuasive. Its witness Yocca testified that he had never testified previously in an electric utility rate proceeding, and had never performed an economic forecast for any private industrial companies. His recommendation, adopted by Commission Trial Staff, is based entirely upon a two-year historical average, no more and no less. On cross-examination, he testified, as follows:

- Q. Could you describe very briefly what economic indicators you have utilized in preparing your proposed GP and LP industrial sales adjustments in the Penelec case?
- A. In preparing this adjustment, I haven't used any specific economic indicators.
- Q. Have you ever had an opportunity to participate in or conduct a survey of Penelec customers served under rates GP and LP with respect to their actual and forecast usage levels?

Accordingly, the ALJ recommended against the Staff proposal and acceptance of Penelec's estimate of its GP and LP MWH sales and revenues. The Staff excepted to the ALJ's recommendation and, for the most part, reiterated its basic position that its adjusted level represents a "more normal" sales level than does Penelec's adjusted figures.

We conclude that the ALJ has properly analyzed this issue. We adopt his recommendation and deny Staff's exception. Accordingly, Penelec's estimate of its GP and LP MWH sales and revenues is accepted.

#### IV. EXPENSES

##### A. OPERATION AND MAINTENANCE

##### 1. Uncollectible Account Expense

In its wrap-up exhibit (Penelec Exhibit B-138), Penelec has claimed uncollectible account expense of \$3,564,000. This represents an upward adjustment of \$1,084,000 over the originally claimed amount of \$2,480,000.

The Staff, on brief, objects to Penelec's upward adjustment of this account. It states that the \$1,084,000 adjustment was introduced by Penelec on June 20, 1983, the date the record was closed. The Staff states that because of the last minute introduction of this adjustment, no party was in a position to investigate the basis of the revised claim.

The Staff also states that Penelec's adjustment was based on accruals from October 1, 1982 to May, 1983, and that Penelec accumulated this information months before submission to the parties. The Staff contends that Penelec had the information available prior to June 20, 1983, and could have submitted updated or revised uncollectible expense, based on actual experience well before June 20, 1983. It argues that to accept Penelec's last minute introduction of an adjustment of this magnitude violates due process. The Staff contends that Penelec's uncollectible expense should be limited to Penelec's original claim of \$2,480,000, thereby reducing the revised claim by \$1,084,000.

Penelec denies that the wrap-up exhibit was introduced for the first time on June 20, 1983. It avers that it was hand delivered to the Staff and other parties during the prior week, in order to facilitate review and preparation for its witness (Carroll) appearance on June 20, 1983. The Company also states that the Staff did review this adjustment and cross-examined witness Carroll at some length on this subject. Penelec also states that in response to Staff interrogatories, it had informed the Staff that the actual uncollectibles for the year ended September 30, 1982 had been \$3,178,298, compared to the budget amount for the future test year of \$2,480,000. Penelec remarks that regulatory procedure favors the submission of the latest information as of the date of the close of the record, which shows that through the end of May, 1983 writeoffs (\$2,453,000) were rapidly approaching the amount it had claimed for the entire future test year.

Penelec witness Carroll's explanation for the low original claim was that the budget claim had been kept purposely low to encourage collection efforts.

The ALJ found the Staff's recommendation to be overly technical, inequitable and without merit. He further noted that the Staff's objection was based solely upon a purported lack of procedural due process, and stated that the Staff made no objection at the conclusion of its cross-examination or at any time prior to the close of the record, and made no objection to the submission of Penelec's Exhibit B-138, page 7, which contained such adjustment.

The ALJ's position is that, any objection by the Staff on due process grounds should have been made prior to the close of the record, in order that the Company could have responded to its objections, and he could have ruled on the matter. The ALJ concluded that having failed to make a timely objection, the Staff had waived any claim to lack of due process. The ALJ noted in this regard that the Staff did inquire into the propriety of the adjustment thorough its cross-examination of Penelec's witness Carroll.

The ALJ recommended approval of Penelec's revised claim for uncollectible account expense, and rejection of the Staff's objection. Staff did not except.

We conclude that the Company's revised claim is reasonable and appropriate for adoption in this proceeding.

## 2. Rate Case Expense

As originally filed, Penelec's \$466,942 rate case expense claim consisted of the following elements:

- (a) \$26,570 for amortization of the 1977 and 1978 rate case expense.
- (b) \$259,372 for recovery of the budgeted expenses associated with the current rate case.
- (c) \$181,000 for a 50% ratepayer share of the \$363,000 estimated cost of the current rate case.

Staff witness Kalbarczyk testified that the claim was overstated by the amount of \$259,372 reflected in category (b), since the expense of the current rate case had been accounted separately under category (c).

Subsequently, the Company, through its wrap-up exhibit, reduced its claim by \$259,372 to eliminate the duplicative treatment of claimed expenses for the current rate case (Penelec Exh. B-138, p. 6). The Company noted that its final claims for rate case expenses do not include expenses associated with the settled 1981 rate proceedings at R-811601, consistent with an adjustment proposed by Staff. As part of its final claims, Penelec also increased the original current rate case expense estimate from \$363,000 to \$368,000 (Penelec Exh. B-49-2). This updated estimate included a claim of \$30,000 payable to Debevoise & Liberman, a New York law firm that represents GPU in a variety of general corporate matters, but did not appear at any Met Ed or Penelec hearings.

On June 20, 1983, the last day of the hearings, the amount claimed payable to Debevoise & Liberman was reduced by the Company from \$30,000 to approximately \$10,000 for services rendered in connection with the current rate case. As a result, the Company's estimated cost of the current rate case decreased from \$368,000 to \$348,000. The ratepayers' share of 50% decreased from \$184,000 to \$174,000, or a downward adjustment of \$10,000.

The Staff argues that the amount is still overstated and that the services listed on the Debevoise & Liberman invoice, Penelec Ex. B-49-3, constitute services that are already being performed by the firm of Ryan, Russell and McConaghy. The Staff considers the services to be duplicative in nature and not properly chargeable to ratepayers.

The ALJ recommended disapproval of Staff's proposed additional adjustment. The ALJ was of the opinion that the invoices and the testimony indicated that these services were supplementary legal services and should be allowed as reduced to the amount of \$10,000, for Penelec's current rate case. The ALJ recommended adjusting Penelec's rate case expenses downward by \$10,000, resulting in corresponding increase to income. The Staff has not excepted to the ALJ's recommended disposition.

We agree with the ALJ and find that the rate case expense claim, as adjusted, is reasonable and is approved.

### 3. Return on Unamortized Expense Balances

Penelec has increased its budgeted test year expenses by \$426,000 to reflect, by means of an annuity, a return on its unamortized expense balances.<sup>17/</sup> Company's claim for recovery of expenses advanced by its investors (but not yet recovered from ratepayers) covers the carrying charges on the investors' capital pending reimbursement from ratepayers. According to Company witness Garland, a level annuity recovery would provide, like a mortgage payment, a return on the outstanding balance of funds advanced by Penelec's investors. While the OCA does not challenge the allowance of an annuity for unamortized expense balances, Staff opposes the claim.

The Staff submits that as a practical matter an annuity recovery procedure is indistinguishable from the practice of claiming the outstanding balances as a rate base addition, which is a practice previously disallowed by the Commission at R.I.D. 599 and affirmed on appeal in Pennsylvania Electric Co. v. Pa. P.U.C., 53 Pa. Commonwealth Ct. 186, 417 A.2d 819 (1980). There the Court affirmed the Commission's disapproval of the capitalization of an item in its rate base and the simultaneously recovery of the item as an expense. However, the Company maintains that the subject claim does not involve rate base recognition of the unamortized expense balances, but provides for recovery of carrying charges only on the amortized balances of such expense (Penelec Exh. F-17). Penelec

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<sup>17/</sup> Unamortized expense balances represent certain operating expenses such as storm damage, abandoned generating sites, rate case expenses, etc., which, for ratemaking purposes, are not wholly charged to operations in the year incurred in order to normalize their impact on rates. The expense items which have not yet been recovered are listed on page 17-A of Penelec's Exhibit B-2.



compares this claim to a utility's cash working capital requirement, arguing that the Company is entitled to carrying charges on its unamortized investments. In conclusion, Penelec asserts that denial of these carrying charges is a deprivation of property without due process of law, in violation of both the Federal and State Constitutions.

The Staff notes that for tax purposes, these operating expenses are deductible in full in the year incurred, thereby crediting investors with lower actual tax expenses than the tax expenses allowed for rate-making purposes. In its Reply Brief, Penelec admits that it did take appropriate expense deductions for tax purposes in the year the expenses were incurred, but contends that any benefits resulting from those tax deductions will be flowed through to ratepayers under the Company's claimed annuities. Penelec submits that these claims, including the associated annuities, are reasonable, recognize financial realities, and should be allowed. The Staff asserts that the claim should be denied and a downward adjustment of \$371,000 made, to return the Company to a straight-line amortization of its unamortized expense balances.

In recommending adoption of the recommendation of the Staff, the ALJ first stated that the policy and practice of the Commission is to provide a return only on funds provided for day to day working capital requirements and not on other types of expenses. Pa. P.U.C. v. Duquesne Light, R-821945 (January 28, 1983). The ALJ views Penelec's unamortized expense balance claim as an abnormal and nonrecurring expense which, therefore, does not meet the requirement for inclusion in cash working capital.

In the ALJ's view, a utility is entitled to rates that are adequate to recover all amounts reasonably expended for the usual and recurring costs of providing service. While the Commission has recognized that extraordinary expenses resulting from strikes, storms, deferred energy expense, cancellation of generating plants, etc., may be incurred, in the ALJ's view the Commission has wide discretion whether to allow such extraordinary expenses, retrospectively, in subsequent rate cases. The ALJ notes that extraordinary expenses are customarily amortized over a period that, in the Commission's opinion, will result in a fair annual charge to income. The ALJ is of the opinion that the Commission can, within its discretion, allow a return on unamortized expense balances. However, in recommending that the Commission decline to do so, ALJ Matuschak opines that the Commission's present practice of not allowing any such return represents a proper balancing of the investor and consumer interests. Instead of placing all the risk on the customer, the ALJ maintains that the costs incurred as a result of extraordinary occurrences should be shared by the investors and the customers. The ALJ recommended that the claim of Penelec for a return on unamortized expense balances in the amount of \$371,000, be disallowed.

The Company has excepted to the ALJ's recommendation, restating the arguments presented in its briefs. We adopt the ALJ's recommendation and disallow Penelec's claim for a return on the unamortized expense balance, or \$371,000.

The Company has failed to present an argument which persuades us to modify the historic practice of not allowing a return on unamortized expense balances. As stated by the ALJ, the Company is reimbursed by ratepayers for its actual expense. To receive further reimbursement by way of an annuity on unrecovered expense balances, would clearly impose all of the risk of extraordinary expenses upon ratepayers. Viewing the issue from this perspective, we fail to see the Company's analogy between unamortized balances of deferred expenses and a utility's cash working capital requirement. The recognized need of a utility for normal day to day cash working capital cannot be reasonably analogized to a requirement for a return upon the costs of extraordinary events which cause a nonrecurring expense. The risk associated with an extraordinary occurrence should be shared between stockholders and ratepayers. Penelec's exception is denied.

#### 4. Decommissioning of Saxton

Penelec's claimed test year operating expenses include a \$481,000 annual accrual toward the costs of decommissioning and dismantlement of the nuclear test facility owned by Saxton Nuclear Experimental Corporation (SNEC) near Saxton, Pennsylvania (Penelec Exh. B-2; p. 16). The GPU Companies propose to accrue the necessary funds over five years, to permit the project to begin at that time, although the time for the commencement of such work is estimated as between five and ten years. The claim for each GPU Company is based on its ownership in SNEC stock, that is, 32% for Met Ed, 24% for Penelec, and 44% for Jersey Central.

The GPU Companies propose that the funds be deposited in a special trust fund that has been established with Hamilton Bank. Mr. Hafer, Penelec's witness, explained that the agreement provides for strict accounting procedures to assure that the funds are used exclusively for decommissioning activities. The agreement also provides that any balance remaining after decommissioning activity will be returned to the ratepayers (Penelec St. A, Supp. 1).

Although a substantial amount of decommissioning and dismantlement activity has already taken place at a cost of some \$429,000 through 1975, the Company estimates that the remaining decommissioning and dismantlement activity necessary to release the site for unrestricted use will cost an additional \$12,454,000 in 1983 dollars.

The Company's cost estimate for the final decommissioning and dismantlement of the Saxton facility is based upon a 1981 project plan developed by the Burns and Roe. The 1981 estimate of \$11,120,000 was escalated by 12% to arrive at a 1983 construction cost of \$12,454,000 (Penelec Exh. E-7).

Company witness Arnold testified that there is no question that the facility, which is now in a mothballed state, will have to be dismantled. He indicated that the dismantlement effort will begin in five to ten years and will take about three to five years to complete (Penelec St. E, p. 23). He emphasized that it would be prudent to

undertake the dismantlement at that time due to the deterioration caused by the environment. He noted that the containment vessel is steel-walled and, hence, is especially subject to corrosion. He stressed that although there is no immediate concern of inadvertent release of radiological material, the site does require attention to assure that it does not become a public hazard. Tr. 500-502.

Based on the five year projected starting time, decommissioning accruals were developed by Company witness Garland. He explained that the request was based on the "Equal Purchasing Power" method, using a five year accumulation period. He assumed an earned interest rate of 7.74% per annum on funds deposited prior to 1984 and 8.71% per annum on later deposits and a projected inflation rate of 5.63% per annum (Penelec Exh. F-16, p. 17).

Staff witness Pachul proposes to reduce the annual allowance for Met Ed to \$33,000. He argues (a) that the Company's cost estimates are excessive, (b) that an excessive inflation rate was used by the Company in adjusting the estimate from 1981 to 1983 dollars, and (c) that the decommissioning work should not begin until 1997.

Staff states that it had requested, through discovery, a breakdown of the contaminated equipment and structures involved, the dismantlement method to be employed, manpower requirements, level of radioactivity and other pertinent data, but that the Company refused to furnish the data on the ground that it would be too costly to assemble.

With respect to the Burns and Roe project plan, the Staff contends that it is suspect because it includes costs for the decontamination of areas that have been previously decontaminated, according to the Company's own internal reports. The Staff asserts that such inconsistencies cast serious doubt upon the reasonableness of the overall Burns and Roe cost estimates. The Staff also complains that the Company adds \$565,000 to the Burns and Roe cost estimates, for radioactive monitoring of the decommissioning and dismantlement activity without any supporting data.

The Staff also states that the Burns and Roe 1981 project plan contains only lump sum figures which preclude examination of the basic data used to develop the Burns and Roe cost estimates. In the opinion of Staff, the Burns and Roe project plan fails to adequately support the Company's claim. Staff recommends that the Commission allow \$5,560,000 as the cost of decommissioning the remaining contaminated portion of the Saxton facility. Staff supports its position though the testimony of its witness Pachul, who developed three independent cost estimates for decommissioning the Saxton facility:

1. Based upon an update of the 1972 Reckman and Montgomery study concerning the estimated cost of decommissioning Saxton, total removal would cost approximately \$3,500,000 in 1983 dollars.
2. Based upon an application of the Nuclear Regulatory Commission (NRC) generic study regarding the

estimated cost of decommissioning nuclear research and test reactors, the most comprehensive study on the subject to date, Saxton's estimated cost would approximate \$5,000,000 in 1983 dollars.

3. Based upon an extrapolation of the Elk River decommissioning experience to the smaller Saxton facility, by application of a thermal power scaling factor, Saxton's estimated decommissioning cost would approximate \$5,560,000 in 1983 dollars.

(Staff St. S, pp. 13-16; Staff Exh. 5-D, pp. 11-23).

To be conservative, Staff witness Pachul recommends the highest of the three independent cost estimates upon which to base an allowance for Saxton decommissioning. In order to properly fund the Saxton decommissioning, Staff witness Pachul also recommends a \$33,000 annual annuity over 14 years invested in 8.5% tax free Pennsylvania bonds to accumulate \$1,780,000 (24% of \$5,560,000 of the Saxton decommissioning cost).

Staff recommends that Met Ed's annual annuity claim for Saxton decommissioning should be reduced by \$448,000 (\$481,000 less \$33,000).

Complainant Ernest Fuller has also filed Main and Reply briefs contending that the Commission should base annual ratepayer contributions on the assumption that the dismantlement will take place in the year 2023. He argues that the current status of the facility does not dictate an earlier decommissioning and dismantlement, and criticizes GPU's plans for proceeding with the work in the near future. He adopts much of the position of the Staff.

Mr. Fuller also argues that another reason to wait is that technology will improve. Making reference to the dismantlement of the Shippingport reactor.

In its Main Brief (pp. 101-107), Penelec criticizes the estimate of \$5.56 million calculated by Staff witness Pachul and again states that decommissioning should be undertaken in five years. The Company asserts that its claims are properly supported in the record and should be allowed. In its Reply Brief (pp. 28-29), Penelec addresses Complainant Fuller's contention and avers that there would be little to gain in waiting until the year 2023 to begin the Saxton dismantlement.

The ALJ first referred to the following cross-examination testimony of Met Ed witness Arnold to shed light on the issue:

- Q. It is the Company's view that the Saxton site in its current mothball condition is safe insofar as the people around it are concerned?

A. Yes, sir, Definitely is.

\* \* \* \* \*

Q. But in the company's estimate, Mr. Arnold, in reviewing this issue, in what point in time does the company think that the situation we're discussing might present a problem insofar as the public in the area is concerned?

A. We have not made an analysis at this point to try to identify specific times at which, let's say major maintenance of the buildings would be necessary to prevent -- or saying it the other way to insure that there's adequate protection against inadvertent releases in the environment.

I think it's probably likely to be in the range of ten to twenty, perhaps 25 years before that would be the case, but the contaminated vessel is a steel walled vessel, and eventually the corrosion attack will be a problem from the standpoint that you are asking the question, I think.

Q. Now, you just said it could be contained with maintenance, is that correct?

A. Yes, I think that with repairs being made to the facility, one could continue to compensate for the effect of aging.

Q. And the same with the control and auxiliary building?

A. I think technically that's feasible, yes. I think again that what all of the institutions that have responsibility relative to such a facility need to work toward is a consensus on when it is desirable to remove such a facility from being an issue.

Again, it is not a matter of whether or not eventually it has to be dismantled. The issue is simply one of the timing of it in my opinion at least, and I think that it's prudent to plan on doing so within the next five to ten years.

\* \* \*

Q. . . . Do you anticipate the state of the art insofar as dismantling is concerned to increase within the next ten to 15 years?

A. Yes sir.

Q. That's regardless of whether Saxton is dismantled or not, isn't that true?

A. Yes, I think the major effort I'm aware of will contribute to that is the decommissioning of the Shippingport reactor. That is also a project which Burns and Roe is heavily involved with and I think that a great deal will be learned in the governmental sponsored project associated with that decommissioning which we will be able to take advantage of in our dismantlement of Saxton.

(Tr. 500-505 (Emphasis added)).

After reviewing the record, the ALJ then made certain observations concerning this matter.

1. No definitive time-table has been established for the start of the decommissioning and dismantlement of the Saxton facility. While Penelec witness Arnold stated that in his opinion it would be prudent to plan this work within the next five to ten years, at the same time he also admitted that the present mothball condition could last, without danger, for 10, 20 or 25 years upon proper maintenance. Other than his bald statement of prudence, no evidence was submitted as the basis for such judgment in view of other testimony of the witness. No evidence was presented as to the cost of such maintenance versus early dismantlement. On the other hand, Commission Staff recommended dismantlement beginning in 1997 (14) years, and Complainant Fuller recommends a 2023 (40 years) start.
2. The Burns and Roe 1981 estimate appears to be inadequate upon which to base decommissioning and dismantlement of the Saxton facility. It appears to us that the Burns and Roe project is in the nature of a preliminary feasibility report, of value only as a basis for determining whether a final engineering study is appropriate. It contains a number of improper or incorrect assumptions, contains a lump sum estimate which cannot be tested, and lacks sufficient detail for final action.
3. It is admitted by the Company's witness that the state of the art in such program is expected to improve within the next few years, and that

lessons can be learned from the existing decommissioning program at the Shippingport nuclear test station. In view of the limited knowledge presently available, and the likelihood of significant new knowledge that will shortly be forthcoming from current decommissioning at other stations, it would appear that the Commission should, at present, act conservatively in this matter.

R.D., pp. 75-76. Thereafter, the ALJ concluded that the evidence submitted by Penelec does supports only the need for the decommissioning and dismantlement of the Saxton facility within some indefinite period of time. In this connection, the ALJ is of the opinion that measures should be taken to insure the funding of such project. However, since the Company itself is uncertain as to the specific time of initiation of such program, and has indicated that the present mothball condition may continue up to 25 years without danger to the safety of the public, the ALJ believed that, at this point in time (pending revision as the occasion may require), the suggestion of the Staff that decommissioning and dismantlement of the Saxton facility be planned for 1997 is reasonable.

The ALJ also adopted the recommendation of Staff that the total cost of such decommissioning and dismantlement of the Saxton facility be fixed, presently, at \$5,560,000 (to be revised from time to time as occasion and better knowledge may require). In view of the fact that this Company's ratepayers have been subjected to unusual costs due to the TMI-2 accident, the ALJ opined that great caution should be taken to insure that unnecessary increases in rates are not imposed upon them. In the ALJ's view, any shortfall in programs of this kind can be made up without substantially affecting the program.

The ALJ adopted the recommendation of Staff and reduced the annual allowance for Met Ed for the Saxton decommissioning to a \$33,000 annual annuity over 14 years. Accordingly, Met Ed's claim was reduced by \$448,000 (\$481,000 less \$33,000). The Company filed an exception, reiterating its argument that the Burns and Roe project plan, upon which the cost estimate of \$12,454,000 (in 1983 dollars) is based, provides a sound basis upon which the Commission can now base dismantlement costs for ratemaking purposes.

We agree with the ALJ that Staff has cast sufficient doubt upon the proposed time for commencement of, and the estimated cost of, decommissioning, to warrant our rejection of the Company's position on these two elements of the issue. However, we do not accept the Staff's method of calculating an annuity designed to recover the cost of decommissioning.

The Staff's method does not appear to take into account the effect which inflation will have upon the ultimate total cost of decommissioning. The result of adopting the Staff's method could be a serious undercollection of the decommissioning cost, which would shift a greater burden on future generations of customers.

We believe that the Company's "Equal Purchasing Power" technique represents a more realistic approach to the problem, incorporating, as it does, a projected inflation rate of 5.63% per year.

In summary, we agree with the ALJ that the Staff's position on this issue should be adopted with regard to the timing and total cost of decommissioning of the Saxton facility. However, we adopt the Company's method of calculating an annual allowance in this case.

Taking into consideration the estimated cost to decommission (\$5,563,000), the estimated decommissioning date (1997), the Company's "Equal Purchasing Power" technique, and Penelec's 24% ownership, we shall reduce the annual allowance for Met Ed for the Saxton decommissioning to a \$43,000 annual annuity over 14 years. Accordingly, we shall reduce Penelec's claim by \$438,000 (\$481,000 less \$43,000) and, accordingly, its exception is denied.

#### 5. GPUSC Charges

Penelec's claim for Account 923 expenses includes \$7,652,000 for outside services charged by GPU Service Corporation (GPUSC). This expense claim represents a 24% increase over the GPUSC's charges for the historical test year. Staff recommends that Account 923 expenses be reduced by \$758,000 to eliminate the abnormal increase in GPUSC charges to Penelec (Staff St. 3.1, p. 1; Staff Exh. 3.1, Sch. 2).

Penelec claims that the projected increased level of GPUSC charges is due primarily to its increasing utilization of computer programming services and GPUSC's expansion of information processing hardware and programming services (Penelec Exhs. B-47, B-47-1, B-51, B-51-1, B-57 and B-57-1).<sup>18/</sup> Penelec submits that the Staff's proposal is mechanical, arbitrary, not supported by probative evidence, and should be rejected.

The Staff asserts that the estimated charges by GPUSC during the future test year are excessive, in comparison to the prior two years, and that an adjustment is necessary to normalize the expenses. In order to develop a normalized level for GPUSC charges included within Account 923 expenses, Staff witness Jones averaged two years of historical data, adjusted for inflation to 1983 dollars, and the test year (Staff Exh. 3.1, Sch. 2). Staff recommends that Penelec's claim for GPUSC charges be reduced by \$758,000.

The ALJ agreed with Staff's proposed adjustment and reduced Penelec's expense claim for GPUSC charges by \$758,000. The ALJ was of the opinion that the Company's general explanation in support of the expense claim was insufficient to justify the large percentage increase.

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<sup>18/</sup> The related contract governing the provision of various services to the operating companies by GPUSC and descriptions of the types of services generally provided are contained in the Company's Exhibit B-51.



The ALJ considered that Staff's method of arriving at a reasonable and normalized test year amount amply provides for the growth needs of the Company by including the full amount of Penelec's claim in the three year averaging process. The Company excepted to the ALJ's recommended disposition of its GPUSC charges claim.

We conclude that Penelec has not satisfied its burden of persuasion on the issue of the reasonableness of the claimed expense level. The future test year expense level does not represent a normal level of GPUSC expenses to be expected in the future. We agree with Staff's method for normalizing the expense level for GPUSC charges. This procedure will levelize expenses and still recognize increases in the expense items by inclusion of the Company's full test year claim in the three-year averaging process.

We adopt the ALJ's recommendation, reduce Penelec's expense claim for GPUSC charges by \$758,000, and deny the Company's exception.

#### 6. EPRI Dues

Penelec's test year operating expenses originally included a \$2,075,000 claim for its annual dues to the Electric Power Research Institute (EPRI). During the course of hearings it was discovered that, as a cash saving measure, the Company had not been paying its EPRI dues for several years, even though an allowance for this item had been included in customer rates. In its final claim contained in its wrap-up exhibit, the Company has removed its \$2,075,000 claim for EPRI dues, and has proposed to fund future EPRI dues payments, at a reduced level, from the \$6,037,000 deferred credit reserve balance. We have previously adopted the net EPRI reserve as a rate base deduction.

The OCA, proposed a rate base deduction procedure different from that proposed by Penelec, and advocated a three-year flow back amortization of the EPRI reserve to ratepayers, and proposed a corresponding increase in operating income of \$2,075,000.

The ALJ recommended rejection of the OCA's amortization proposal, in favor of the Company's proposal supported by Staff. The OCA has excepted to the ALJ's recommendation.

We have already discussed this issue, and adopted the ALJ's recommendation in the rate base section of this Opinion and Order and further comment on this matter is unnecessary. We reject the OCA's proposal and, accordingly, its exception is denied.

## 7. Spent Nuclear Fuel Disposal Costs

As a consequence of the passage of the Nuclear Waste Policy Act of 1982 and the regulations published thereunder, the long-term disposal costs of spent nuclear fuel will be controlled by a standard contract with the U.S. Department of Energy. Pursuant to the terms of that standard contract, Penelec has revised its claim for spent nuclear fuel disposal costs as follows: \$1,208,000 per year for discharges after April 7, 1983; and \$928,000 per year for discharges prior to April 7, 1983 and for nuclear fuel in the reactor.

The ALJ, noting that the Staff has voiced no objection to the revised claim for spent nuclear fuel disposal costs and accepted the revised claim of the Company. We agree with the ALJ. The revised claim is approved.

## 8. TMI Normalization O & M Expenses

Through the testimony and exhibits of its witness R. C. Arnold, Penelec has presented a claim for TMI-1 operation and maintenance expenses. According to witness Arnold, the expected level of normalized annual O & M expenses for TMI-1 (exclusive of fuel and taxes) is \$56 million on a total company basis (PN St. E, pp. 12-16, Exh. E-4). Penelec's 25% share of that claimed expense is \$14 million per year.

Witness Arnold indicated that it would not be appropriate to utilize actual or budgeted test year data in fixing an annual allowance for TMI-1, due, among other things, to the fact that TMI-1 was not operating throughout the test year. Therefore, the claim of Penelec is predicated upon the expected level of O & M costs that will be incurred when TMI-1 returns to normal operations. Mr. Arnold submits that the claimed TMI-1 O & M costs are necessary and reasonable for the provision of service and for assuring the safe operation of the plant (PN St. E, p. 16). Witness Arnold also notes that the normalized level of \$56 million is only \$3.5 million above the normalized 1981 level of \$45.5 which was recognized in the 1981 Settlement Agreement (after that 1981 level has been adjusted for intervening inflation).

The Staff states that during cross-examination it was discovered that approximately \$4.6 million of the \$56 million claimed for TMI-1 normalized O & M expense, is associated with TMI-1's first refueling outage after restart. Tr. 431. The Staff further states that the Company's projections indicate that TMI-1 would return to service during July 1983 and that the first refueling outage would take place during August 1984, 13 months after restart and 11 months after the end of the future test year. Tr. 463-64. The Staff opines that later restart dates and less than optimum TMI-1 operating performance would delay any refueling outage expense even further.

For these reasons, the Staff considers it inappropriate to include the refueling outage expense in the TMI-1 normalized O & M expense level, at least for the first year of operation. The Staff

proposes that the Penelec's <sup>19/</sup>claimed TMI-1 normalized O & M expense level be reduced by \$1,150,000.

In addressing the Staff's proposed adjustment, the ALJ noted that the Staff does not contend that the refueling outage is not essential nor does it suggest that the expenses claimed for the refueling are unreasonable in magnitude. The ALJ then concluded that Staff's proposed adjustment should be rejected. His rationale for rejecting Staff's adjustment is as follows:

The Company is seeking solely to gain ratemaking recognition for an appropriate normalized level of operating and maintenance costs for TMI-1. No one could seriously maintain that a refueling outage is not a significant, essential and normal element in a nuclear plant's operating cycle. We will not reject such allowance simply because the refueling will not occur within the test year. Refueling outages are normal facts of life for nuclear plants. Their costs are properly accruable and allocable to the full period of the operating cycle and not merely to the relatively brief period during which the refueling work actually happens to occur. To do otherwise would allow the ratepayers the benefit of the great bulk of the operating cycle and place refueling and maintenance costs upon the stockholders.

We would consider it improper not to recognize these prospective TMI-1 costs, especially considering that revenues associated with TMI-1 are not proposed to be collected until the unit resumes operation.

We, therefore, reject Commission Trial Staff's recommendation that Penelec's 25% share of the overall TMI-1 O & M expense level of \$4.6 million, amounting to \$1,150,000, be deducted from Penelec's O & M expenses.

R.D., pp. 94-95.

The Staff has excepted.

In its exception, the Staff stated that, as a general rule, refueling expenses should be allocated to the full period of the operating cycle, but the particular circumstances of this case warrant a different conclusion. Given the extended outage of TMI-1 to date (4.5 years) and the substantial technical modification to the Unit since the TMI-2

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<sup>19/</sup> This reflects a 25% share of the total disallowance of \$4.6 million proposed by the Staff on a total basis.

accident, the Staff considers the Company's projection for a refueling outage 13 months after restart to be overly optimistic. In the opinion of the Staff, 13 consecutive months of trouble-free operation after any restart is unlikely. The Staff maintains that, if TMI-1's output is less than anticipated, the date of the first refueling outage would be further delayed beyond the first year of TMI-1 operations.

We adopt the ALJ's recommendation that the Staff's proposed adjustment be rejected. As appropriately stated by the ALJ, the costs of refueling outages "are properly accruable and allocable to the full period of the operating cycle and not merely to the relatively brief period during which the refueling work actually happens to occur." The Staff's exception is, accordingly, denied.

#### 9. TMI-1 Decommissioning

Penelec's decommissioning claim for TMI-1 is based upon a \$40.1 million total TMI-1 decommissioning cost estimate, stated in 1983 dollars, for the in-place entombment method of decommissioning. A \$254,000 annual annuity, using the "Equal Purchasing Power" method was developed by Company witness Garland, which proposes to accumulate, by mid-2009, Penelec's 25% share of the anticipated decommissioning cost.

According to the Company, the cost estimate is in accordance with previous Commission decisions in R.I.D. 434 and R-78060626, which approved allowances for eventual decommissioning based on the in-place entombment method, but allowed the costs for only the nuclear related portions of the plant.

Mr. Garland assumed the unit will be retired in the year 2009, in accordance with the Commission's previous policy of using a thirty-five year operating life. The present operating license expires in the year 2008.

While Penelec's cost estimate excludes the non-nuclear related portions of TMI-1, it expresses its belief that funds should also be accrued to provide for the decommissioning of the entire plant, not just the nuclear portions. It claims that the current policy fails to assure that funds will be available for decommissioning in its entirety.

Witness Garland also recommended utilization of what he has termed the "Equal Purchasing Power" sinking fund approach, which he claims will achieve equity among the various generations of ratepayers by recognizing inflation in the calculation of the annuity. Penelec claims that this method results in customers paying the same "real" amount, in terms of purchasing power, each year. An inflation rate of 5.63% per annum was assumed in developing the required annuity. Earnings on existing funds at 7.55% and 8.72% on future deposits were assumed, based upon yield data available in September, 1982.

Witness Garland compared the "Equal Purchasing Power" method to what he referred to as the Pa. P.U.C. method. This latter method, he contends, permits customers in the initial years to pay much less than

customers in later years both in absolute dollars and in "real" purchasing power terms. In fact, witness Garland stressed, under the current method, at year 20 (2003), with only 5.5 years remaining, 53.7% of the cost estimate would be unfunded, compared to 27-28% unfunded under the "Equal Purchasing Power" method. Thus, he asserted, the customers would then be required to pay progressively larger sums to make up for the deferred recognition of inflation. The "Fully Escalated" method, at the other extreme, he stated, would result in constant accruals each year, but actual costs to customers in earlier years would be greater, in terms of "real" purchasing power, than the costs to customers in later years. He recommends the "Equal Purchasing Power" method as a fair, middle-ground, approach.

Staff witness Pachul recommends a downward adjustment of \$175,605 for Penelec's share of the annuity requirements for the decommissioning of TMI-1. He urges the Commission to continue with the Pa. P.U.C. method. Given the limited number of satisfactory waterfront sites for future large power generating stations in Pennsylvania and the potential hazard that remains at an entombed nuclear facility, witness Pachul recommends that TMI-1 decommissioning costs be based upon the removal/dismantlement method where, after all radioactive materials are removed and decontaminated, the site is released for unrestricted use. Using the overall thermal power scaling factor developed by the Nuclear Regulatory Commission (NRC) and published at NUREG/CR-0672, he estimated the total cost of removal/dismantlement of the radioactive portion of the plant at \$37.7 million in 1983 dollars.

Witness Pachul also calculated the annual annuity necessary to accumulate Penelec's 25% share of the anticipated TMI-1 decommissioning costs. He states that, a \$79,000 annual annuity invested in tax-free Pennsylvania bonds and compounded at 8.5%, using the sinking fund method approved by the Commission in prior rate cases, will yield the necessary funds to decommission TMI-1 by mid-2011, the anticipated retirement date.

In the opinion of the ALJ, the need for provision for decommissioning of non-nuclear portions would be conjectural at best, and may unnecessarily burden present ratepayers. The ALJ reasoned that provisions for decommissioning of nuclear plants are not cast in stone, and changes should be made as changing requirements may dictate. Within a short period, as nuclear plants begin to be retired, additional knowledge on the subject will be forthcoming, at which time, the ALJ states, necessary adjustments can more appropriately be made.

With respect to the calculation of the annuity, the ALJ adopted the sinking fund (Pa. P.U.C.) method approved by the Commission in prior rate cases. The ALJ did not consider it appropriate to change the annuity procedure with every rate case. He reasoned that refinements in the annuity procedure may be more appropriate as more knowledge on the subject relating to methods, costs, etc., becomes available with experience.

The ALJ was also persuaded that the removal/dismantlement method is preferable in today's climate, to the entombment method which the Commission previously adopted. In addition to the reasons for the

recommended change cited by witness Pachul, the ALJ took administrative note of the public concern regarding stored nuclear and toxic substances.

The ALJ accepted the Staff's recommendation and reduced Penelec's TMI-1 decommissioning claim by \$175,000 (254,000 less \$79,000). Penelec excepted and argues that the ALJ erred in adopting the Staff's cost estimate (\$37.7 million in 1983 dollars), erred in not recommending adoption of its "Equal Purchasing Power" method, and also erred in using a mid-2011 retirement date for TMI-1. Furthermore, the Company states, the TMI-1 entombment method estimate for the nuclear plant portion, which was used in past rate proceedings and updated (for inflation) in these proceedings, should be used again until new concrete Federal regulatory guidance is forthcoming.

We agree with the ALJ, who adopts the Staff's position, with regard to certain elements of this issue; namely, the estimated total cost of decommissioning (\$37.7 million in 1983 dollars) and the date when decommissioning should commence (year 2011). However, we do not accept Staff's method of calculating an annuity to recover the cost of decommissioning.

The Staff's method does not consider the impact of inflation and is likely to result in a significant underfunding of the ultimate cost. If this should occur current ratepayers will not be paying their fair share and future generations of ratepayers will be called upon to fund the deficiency.

We believe that the Company's "Equal Purchasing Power" sinking fund technique is a more realistic approach and should be adopted. While the Company's method may not be perfect it does consider the effects of inflation and will spread the cost of decommissioning more evenly over generations of customers.

Taking into consideration the estimated cost of decommissioning (\$37.7 million in 1983 dollars), the estimated decommissioning date (2011), the Company's "Equal Purchasing Power" method, and Penelec's 25% ownership, we shall reduce the annual allowance for Penelec for the TMI-1 decommissioning to a \$211,000 annual annuity over 28 years. Accordingly, we shall reduce Penelec's claim by \$43,000 (\$235,000-\$211,000).

#### 10. Return on TMI-2 Investment

The Company is requesting an accounting change reducing the level of TMI-2 amortization, to be offset by a recognition of the long-term debt and preferred stock costs associated with its TMI-2 investment (PN St. A, p. 8). According to Penelec, the accounting change would not increase current charges to ratepayers but would extend the amortization for a longer period of time (PN St. D, p. 34). The exact length of such extension would be dependent upon when TMI-1 returns to service, since under the 1981 Settlement Agreement, at R-811602, TMI-1, revenues are to be accounted for as additional accruals to the TMI-2 amortization reserve, pending TMI-1's return to service (PN Exh. A-6). Penelec witness Graham explained the dollar impact to future ratepayers as a result of the extended amortization period:

Q. All right. Let's look at the extension of the amortization period, Mr. Graham. While there may not be any impact on current ratepayers for I believe you estimate a seven to ten-year period depending on TMI-1, there will be increased payments and expenses at the end of the amortization period.

Have you tried to quantify the amount of dollars attendant to the extended amortization period that future ratepayers would be responsible for?

A. Isolating the amortization alone, it's essentially 37 or so million dollars times the number of months.

Q. 37 million a year?

A. Yes, times the number of years.

Q. That would be for Met-Ed, right?

A. Yes.

Q. And for Penelec the effect would be what, roughly 17 million?

A. Yes.

Q. So we are talking roughly a two and a half year extension --

A. It would be in the vicinity of 90, 95 million.

Q. For Met-Ed and for Penelec it would be 40 to 50 million; is that right?

A. Yes, sir.

Tr. 391.

Penelec asserts that the debt interest and preferred stock dividends associated with its TMI-2 investments are sizable contractual obligations which must now be paid out of funds provided to common shareholders for return on non-TMI investments or other costs (PN St. D, p. 34). As a result of the 1982 rate case settlement and reduction in construction and O&M expenditures, Penelec states that its cost position has permitted it to repay its bank debt, retire maturing bonds and pay State taxes. However, Penelec calls attention to the fact that its operating losses have continued. Penelec asserts that the cause of such losses are the removal of TMI-1 and TMI-2 capital costs and most of TMI-1 operating costs from base rates, and the realization of a smaller achieved return, on non-TMI investment, than was authorized by the Commission. Consequently, Penelec avers that its return on common equity was less than 8% in 1982; and that without rate relief, it forecasts to earn only 3.4% in 1983. Penelec also avers that its 1982

year-end coverage of 2.7 is projected to drop to 2.1 at year-end 1983 without rate relief. According to the Company, the proposed accounting charge would greatly aid in beginning the restoration of its financial health at no additional cost to present ratepayers. Company witness Graham submits that "not to allow the requested accounting change has the effect of taking from the common shareholder amounts which the Commission has found to be due him" and "is a major reason why Met Ed (Penelec) continues to be in a loss position". (PN St. D, p. 34).

Penelec's conceptual support for requesting the alteration of the accounting of the TMI-2 amortization, so as to allow a return on that plant for debt and preferred stock investment, is based upon the following trade-off as set forth by the Company's witness Graham on cross-examination:

Q. Now, I believe that at page 35 of your statement you state that the trade off, so to speak, on behalf of future customers of both operating companies is the fact that the amortization treatment now would aid both Met Ed and Penelec in attaining a better financial posture and that better financial posture would enable both companies to raise capital at a reduced cost in the time frame to construct facilities for the benefit of those future ratepayers, is that right?

A. Yes. And remember, those ratepayers will also pay the capital costs incurred along the way for debt that's issued in 1986, '87, '88, whenever, so it's a combination of what they are paying for the debt that has been incurred and the debt that will be incurred in that period of time.

Q. Yes. But that's the trade off as you see it for future ratepayers. They have to pick up the increased payments they [sic] have been discussing because of the extension of the amortization period but at the same time, they should have lower financial costs for the construction for facilities for them that come out of the change in the amortization process, so there is some benefit to them as well as having to pick up the freight, so to speak, at the end, is that right?

A. Yes.

Tr. 392-393.

In his direct testimony, witness Graham explained his presumption of adequate future benefits as follows:

But it is those customers for whom Met-Ed and Penelec will have to expand capacity by, for example, constructing new coal-fired generating



facilities. And to build those, these Companies will, with this accounting change, go into that period with much stronger coverage and earnings histories, better equity ratios, and, therefore, lower costs of debt and preferred stock.

(PN St. D, p. 35).

The Staff and the OCA both oppose Penelec's request to alter the accounting of TMI-2 amortization, to allow a return on long-term debt and preferred stock.

The Staff considers the proposed accounting change to be no more than a request for a partial return on its non-used and useful TMI-2 investment. The Staff argues that, to the extent that property such as TMI-2 is not used and useful, ratepayers are not required to support any portion of its costs.

The OCA also argues that the proposed accounting change violates this Commission's proper exclusion of TMI-2 from rate base for return purposes. Moreover, asserts the OCA, while the accounting change has the cosmetic appeal of not altering current rates, the dollar impact upon future ratepayers is substantial.

The ALJ found the Company's proposed accounting change in conflict with the Commission's decision at I-7909040308 (Phase I), where the Commission expressly removed TMI-2 from Penelec's rate base. The ALJ viewed the Commission's action there as a proper balancing of interests, in that it denied Penelec a return on property which it found to be not used and useful in public service, but required ratepayers to fund replacement power on an ongoing basis. After considering the Company's arguments, the ALJ did not find any justification for allowing Penelec to continue the collection of purchased power expense while at the same time earning a partial return on TMI-2.

The ALJ then noted that the Commission has already approved certain measures regarding TMI-2, by allowing recovery of the investment in rates, via accelerated amortization. In addition to this, an affirmative disposition of the Company's proposal would grant the Penelec's senior capital holders a return on their investment.

The ALJ emphasized that TMI-2 remains not used and useful and there is no evidence of any prospective change in that status. Accordingly, the ALJ concluded that no return should be earned on that plant, especially since ratepayers continue to pay for replacement power on a current basis.

The ALJ opined that because TMI-2 is no longer used and useful, the ratepayers are no longer required to support any portion of its capital costs. See Philadelphia Suburban Water Co. v. Pa. P.U.C., 58 Pa. Commonwealth Ct. 242, 427 A.2d 1244 (1981). Accordingly, the ALJ accepted the recommendations of the Staff and the OCA, and rejected the request of Penelec to alter its accounting for the amortization of TMI-2 so as to allow a return on long-term debt and preferred stock. Penelec

excepted to the ALJ's recommendation that the proposed accounting change be rejected.

In addition to incorporating the arguments previously made, the Company states that its request is not the same as including TMI-2 in rate base and that it is not requesting any return on TMI-2 common equity. Penelec maintains that the only change which it has proposed is a partial accounting change which would permit a portion of the previously allowed TMI-2 amortization revenue to be treated as recovery of the capital carrying costs of the debt and preferred stock associated with TMI-2 investments.

As recognized by Staff in its reply exception, the Company's interpretation of its own position is inconsistent with the practical effects of the requested accounting change. By reducing the TMI-2 amortization to match the debt and preferred stock carrying costs on the TMI-2 investment, the accounting change has the effect of rate base recognition of a portion of TMI-2. This characterization of the Company's request for an accounting change was recognized by Penelec witness Hafer:

Q. And would you agree that an alternate way of computing the revenue requirement for this aspect of your filing would be to include a portion of the TMI-2 investment in rate base?

A. That would be an alternate way to accomplish it, yes.

Tr. 52. OCA witness Dirmeier also referred to the correlation between the Company's proposal and rate base recognition of TMI-2:

...Met Ed (Penelec) proposes to treat a portion of the amortization revenues and return, thereby providing a return on the debt and preferred stock investment in TMI-2.

Another way of viewing Met Ed's (Penelec) proposal is as follows:

1. Include approximately \$80 million of the investment in TMI-2 in rate base, since \$80 million of rate base approximately equates to \$7.5 million of operating income requirement.
2. Reduce the amortization revenues for TMI-2 by precisely the same amount as the increase in revenues for return.

The Companies request to earn a partial return on TMI-2 is clearly inappropriate. I recommend that

it be totally denied. The Commission has previously ruled that Met Ed's investment in TMI-2 is not used and useful. No portion of the plant has become used and useful since that prior determination, and therefore no portion of the plant should be allowed to earn a rate of return.

(OCA St. 4, pp. 13-14).

We reject the Company's request. To grant it would be tantamount to partial rate base recognition of TMI-2. The Company's exception is denied.

#### 11. Tree Trimming and Brush Control Costs

Penelec has claimed \$10,578,000 for tree trimming and brush control costs (PN Exh. B-47-1, p. 5; Tr. 157). Of this amount \$9,915,000 is attributable to outside contractor costs. Penelec's claim represents a 53% increase in those expenses over 1982.

As stated by the Company, the increase in this expense is the result of moving from a nine year tree trimming cycle to a five year cycle, to be achieved by 1987 (PN Exh. B-133). Penelec witness Carroll pointed out that the purposes of this increased effort are: (1) to provide improved service throughout Penelec's territory, much of which is rural and mountainous; (2) to provide for the anticipated substantial increases by 1987 in distribution line miles which require annual tree trimming maintenance; and, (3) to reduce the number of emergency calls made during overtime hours (PN Exh. B-133; Tr. 1501).

The Staff contends that this substantial increase for tree trimming and brush control expenses is inadequately supported.

The Staff recommends a downward adjustment in Penelec's claim of \$2,086,000. To reflect a normalization of this expense, Staff witness Jones averaged a three-year period, the historical data for the years ending September 1981 and 1982, adjusted for inflation 1983 dollars, and the budgeted level for the future test year. The Staff maintains that even the reduced normalized level recommended by witness Jones would allow Penelec an additional 21% over the tree trimming costs actually experienced in the historic test year.

Despite testimony by Penelec witness Carroll that overtime expenses would be reduced, the Staff notes that there has been no corresponding reduction to those expenses in Penelec's filing (PN Exh. B-133; Tr. 160-161). In fact, Staff asserts, witness Carroll was unable to quantify any countervailing benefit (expense savings) which ratepayers would receive with an increase in tree trimming expense.

The ALJ assumed that a step-up in the tree trimming cycle from a nine to a five year period would reduce the Company's other expenses. However, finding that the Company failed to provide an explanation as to how the step-up in the tree trimming cycle would reduce its expenses,

the ALJ determined that some method must be utilized to arrive at a reasonable tree trimming allowance for the future test year.

In the opinion of the ALJ, the method utilized by Staff witness Jones was reasonable in that it provided for improvements in vegetation control by including the full budgeted test year claim in the three-year averaging process. The ALJ accepted the recommendation of the Staff and reduced Penelec's tree trimming and brush control costs by \$2,086,000. Penelec excepted. It states that the savings expected to result dollars from its increased tree trimming activity may not be realized until its accelerated tree trimming program has been under way for some time.

We also conclude that the method utilized by Staff witness Jones is reasonable. This method for arriving at a reasonable tree trimming expense for the future test year incorporates the full budgeted test year claim in the three-year averaging process. Moreover, the expense level proposed by Staff allows Penelec a 21% increase over the tree trimming costs actually experienced in the historic year. We are of the opinion that the expense level proposed by Staff, which provides for a 21% increase over the historic test year level, is reasonable for use in this proceeding.

Therefore, we shall adopt the recommendation of the ALJ and reduce the Company's tree trimming and brush control expense claim by \$2,086,000. Penelec's exception is, accordingly, denied.

#### 12. GP and LP Sales Levels

In connection with the Staff's proposed increase in Penelec's revenues by \$28,319,000 to reflect its normalized GP and LP MWH sales, it was recommended that Penelec's expenses be increased by \$13,129,000 as an adjustment to fuel costs associated with the revenue adjustment.

Since we have rejected that proposal, this proposed concomitant adjustment is inappropriate and will not be made.

#### 13. Wages and Benefits

Penelec originally claimed a total of \$67,398,000 for operation and maintenance payroll expenses -- \$23,870,000 for monthly employees and \$43,528,000 for weekly employees. This claim reflects a 6.4% wage increase for both weekly and monthly employees. Penelec subsequently reduced its payroll claim for weekly employees by \$533,000 to reflect an actual 5.1% wage increase granted to weekly employees. Penelec's claim, as adjusted, is, therefore, \$66,865,000.

Both the Staff and the OCA proposed adjustments to the Company wage claim.

The Staff recommends a \$981,000 reduction in the payroll claim, with an additional \$100,000 reduction in employee benefits. The Staff's adjustment reflects an across-the-board increase of 4% for both

monthly and weekly employees. It bases this further adjustment on its contention that a 6.4% wage increase to monthly employees and a 5.1% increase to weekly employees is unreasonably high and fails to reflect current economic conditions within Penelec's service territory. The Staff claims that its proposed adjustment reflects the experienced increase in the 1982 consumer price index of 3.9%, which is 2.5% below the increase claimed for monthly employees, and 1.2% below the weekly payroll increase claim.

Staff witness Jones, who proposed the adjustment to Penelec's wages, testified that he based his adjustment on the economic situation in Penelec's service territory and the fact that Penelec's employees were granted substantial increases in 1982 (10.37% monthly; 9.0% weekly). Although witness Jones did not do an extensive economic study of Penelec's service territory, his testimony was based on information concerning the general economic situation in Penelec's territory. He points out that in Penelec's 1982 Annual Report, James R. Levan, President of Penelec said ". . . our service territory. . . has been especially susceptible to the impact of recession, with the unemployment rate in the major communities ranging to more than 20 percent."

In addition, the Staff stated that Penelec witness Carroll admitted that Penelec has had financial problems and that cost control has been an important aspect of Penelec's management aims over the past several years. The Staff contends that a downward adjustment to wages should be in the amount of \$1,081,000 (which includes \$100,000 for the associated employee benefit expenses) to \$65,884,000 rather than the claimed \$66,865,000.

Penelec claims that, as pointed out by its witness Carroll, its claimed wage rate increase is modest when compared to other comparable utilities, i.e., Penn Power Co. (9%), Pennsylvania Power & Light Co. (7.53%), West Penn Power Co. (7%), Jersey Central Power & Light Co. (9.6%). It urges, moreover, that Penelec's claimed wage rate increases are well below the 6.2% rate of increase from February 1982 to February 1983 reflected in the Current Labor Statistics' component index which relates specifically to wage rates of public utilities.

Citing City of Pittsburgh v. Pa. P.U.C., 168 Pa. Super 95, 78 A.2d 35 (1951), Penelec states that a well established legal principle of ratemaking is that rates of a utility must cover all legitimate costs. The Company contends that its modest rate increase is a legitimate cost which should be allowed.

Further, Penelec argues, the Staff's proposed ceiling on wage increases completely ignores the arms-length bargaining which takes place between the Company and its unions. It urges that to deny Penelec the recovery of actual wage rate increases which have resulted from good faith bargaining, on the basis of some arbitrary ceiling which is totally unrelated to such wage rates, would amount to confiscation. When measured against wage rates of its neighboring utilities, Penelec claims that its wage increases are conservative.

In support of its proposed adjustment the OCA asserts that proper ratemaking requires that the Company's budgeted level of new employees be reduced to reflect actual results for the test year. The OCA states that Penelec's budget has assumed additional employees with an annual total expense for these employees of \$684,000 (\$830,000 including benefits).

The OCA offers two reasons for reducing Penelec's claim: (1) Penelec has consistently hired fewer employees than were budgeted and; (2) the actual data provided by Penelec in this case evidences that the trend is continuing through the test year period (OCA St. 2, p. 29). OCA witness Dirmeier stated the following:

...As of March 1983, the budget would have added \$52,000 per month in expense for new employees. In fact, the Company has only added \$29,000 per month.

(OCA St. 4, p. 31).

In calculating his proposed adjustment, OCA witness Dirmeier employed a hiring ratio between actual hiring and budgeted hiring, as the most reasonable measure of this expense. That ratio resulted in a new employee expense increase, based upon actual experience at the time of preparation of his testimony of \$465,000, as opposed to the \$830,000 claimed by Penelec.

However, in the interim between the time of witness Dirmeier's testimony and the close of the record, Penelec submitted its updated actual data in Penelec Exhibit B-142, factoring an additional two-months of actual data into the hiring ratio, which results in a reduction in the expense adjustment proposed by the OCA from \$365,000 to \$149,000.

The ALJ commented upon the Staff's proposal as follows:

We believe that this Commission, in considering the reasonableness of Penelec's wage increases in this rate increase proceeding should consider all factors that relate thereto. Without intending to limit such factors, we suggest a few. First must be considered the financial condition of Penelec, with its TMI problems, which places it in an incomparable position as pertains to other utilities. Second is the fact that Penelec's employees were granted substantial increases in 1982 (10.37% monthly; 9.0% weekly). Third is the general economic conditions which have tempered recent wage increases, especially in its service area, and to some extent have resulted in some wage concessions. Fourth is the fact that the Company originally advocated a 6.4% increase for both monthly and weekly employees. Fifth is the impact of continued rate increases upon the customers of Penelec. Sixth is the fact that it recently negotiated a new contract with its weekly

employees at a 5.1% increase. Seventh it must be recognized that the Company must compete with other utilities in the wage market. Eighth is the fact that effective increases for monthly employees are somewhat higher than the 6.4% claimed by reason of the annual merit increase. Ninth is the assurance of labor peace.

While we agree with Trial Staff that neither the Commission nor the Company can be oblivious to the economic conditions prevailing in determining the reasonableness of wage increases for the Company employees, we cannot accept the Trial Staff's recommendation that the wage rate of 4% for both weekly and monthly employees be adopted to conform to the 1982 consumer price index. Such simplistic process does not adequately reflect the myriad of factors involved in the wage-fixing process.

We believe that the 5.1% wage increase granted to weekly employees, reached in an arms-length negotiating process has included therein all of the factors set forth above, and represents a reasonableness recognized in the marketplace.

At the initial filing, the Company's claim reflected the identical increase of 6.4% for both weekly and monthly employees. We adopt Penelec's original position that identical increases should be granted to both. Since the appropriate increase has been tested through negotiation to 5.1%, we believe that such increase would also be reasonable for monthly employees, especially since monthly employees receive annual merit raises in addition.

With a 5.1% wage increase for monthly employees, also, Penelec's wage claims should be further adjusted downward by \$372,000 including benefits.

R.D., pp. 108-109.

The ALJ provided the following analysis of the OCA's proposal:

Penelec's Exhibit B-142 shows that as of May, 1983, the actual annual increase was 45 employees, while the annual budgeted increase for the test year was 55. While Penelec has fallen slightly behind schedule in its projected level of payroll additions, the Company is anticipating that by the end of the test year all of its projected payroll additions will have taken place.

We agree with Penelec that the adjustment proposed by the Consumer Advocate would have the effect of short-circuiting the whole future test year concept, by adjusting prematurely for temporarily lagging intra period payroll additions.

We reject the recommendation of the Consumer Advocate to reduce expenses related to new employee additions by \$149,000.

R.D., p. 111.

The OCA excepted and cited Pa. P.U.C. v. Philadelphia Electric Company - Gas Division, R-811719 (June 25, 1982), as authority for the Commission establishing ratemaking allowances based upon the best evidence of actual patterns occurring during the future test year as opposed to future test year end estimates. We believe that the OCA's interpretation of our treatment of the utilities gas injection prices in Philadelphia Electric Company - Gas Division is too broad.

In that proceeding, we rejected the utility's gas cost claim "as being too speculative" and "not necessarily reflective of the actual prices which will prevail at that time." Mimeo, p. 20. Here, the fact that the projected level of payroll additions is behind schedule, does not warrant a finding that the estimated level of payroll additions, by test year end, is "too speculative". The Company anticipates that by the end of the test year all of its projected payroll additions will have taken place. As opposed to the market price of gas for a gas utility, the level of payroll additions is a matter largely under the control of the Company. We concur with the ALJ's recommendation that the OCA's proposed adjustment be rejected. The OCA's exception is denied.

The Company has excepted. In its exception, Penelec argues that the ALJ is mistaken in his notion that Penelec's original position was that identical wage rate increases should be granted to both monthly and weekly employees. Penelec states that the actual wage increase granted to monthly employees on January 1, 1983 was 6.4% (PN Exh. B-2, p. 13).

Although there appears to be a discrepancy as to Penelec's original position, the ALJ made a thorough analysis with respect to an appropriate wage increase. The ALJ determined that 5.1% would be a reasonable wage increase for both weekly and monthly employees. We concur.

We shall adjust Penelec's wage claim downward by \$372,000 including benefits. Penelec's exception is, accordingly, denied.



#### 14. Ratepayer Funding of TMI-2 Clean-Up

Penelec has included in its rate request a step-up to the full "Thornburgh level" of ratepayer contribution for the clean-up of TMI-2.

In its last base rate proceeding, the Company sought recognition of annual revenues for TMI-2 decontamination funding which were consistent with the goals of the cost sharing plan prepared by Governor Thornburgh (Thornburgh Plan), i.e., \$25 million for Met Ed and 12.5 million for Penelec. The Settlement Agreement at R-811601 which concluded those proceedings, authorized the Company's requested levels of revenues for TMI-2 clean-up, but, under Step 2 of the Settlement Agreement, rates would only reflect the full contribution level when TMI-1 returned to service and met the stated operational requirements (PN Exh. A-6).

In August, 1982, when it was obvious that TMI-1 would not return to service as soon as the Company had expected, the parties to the Settlement Agreement, through appropriate amendments approved by this Commission, unlinked from TMI-1's return to service a portion of the authorized but unimplemented level of clean-up funding, by reducing customer revenues for TMI-2 amortization and allocating a like amount for TMI-2 clean-up, pending TMI-1's return to service (Supplement 1 to PN St. A., p. 4). This change in accounting made available to Penelec for TMI-2 decontamination funding, annual revenues of \$5.0 million. (PN St. A., p. 22).<sup>20/</sup>

Penelec witness Hafer summarized the claim as follows:

Met-Ed's and Penelec's proposal regarding TMI-2 decontamination funding is to unlink, from the TMI-1 operating criteria of paragraph 4 of the Settlement Agreements, some \$8.3 million for Met-Ed and some \$7.5 million from Penelec of additional customer funding of TMI-2 decontamination. Such allowances, in conjunction with Step 3-A revenue allowances of the Settlement Agreements, will bring customer participation in such funding to the full level of the Thornburgh Plan.

(PN St. A, p. 8). Under the proposed accounting change, there would be no net change in customer rates, although the length of time to fully amortize the Company's investment in TMI-2 would be lengthened.

The Company emphasizes that its request is simply that the balance of the TMI-2 clean-up revenues already authorized by this Commission be unlinked from the timing of TMI-1's return to service. Given the present uncertainty as to just when Unit 1 will return to service,

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<sup>20/</sup> Penelec states that the New Jersey Board of Public Utilities (in its order of July 16, 1982 relating to Jersey Central Power and Light (Jersey Central)) approved contributions by Jersey Central's ratepayers toward TMI-2 clean-up at the full Thornburgh Plan level, without any delay or link to the return of TMI-1 to service. Tr. 1414.

Penelec asserts that it is unreasonable to retain the requirement that the provision of the balance of these decontamination funds, be dependent upon TMI-1's return to service.

The Staff supports this accounting change for the following stated reasons:

1. Full participation by Pennsylvania customers in the TMI-2 decontamination effort would provide additional funding for the decontamination effort that must be completed. It is in the health and safety interests of all that the radioactive contamination at TMI-2 be eliminated as soon as possible.
2. New Jersey customers are already full participants in the TMI-2 clean-up funding.
3. Full participation should eliminate any further argument from other potential funding sources that Pennsylvania customers are not paying their fair share.
4. Full participation by means of an accounting change will not increase customer rates.
5. Reduction to the annual TMI-2 amortization is consistent with OCA's position that the current level of TMI-2's amortization places an excessive burden on ratepayers.

For these reasons, Staff urges that ratepayer funding of the TMI-2 clean-up should be increased to the level indicated in the Thornburgh Plan, by means of an accounting change, as proposed by the Company.

The OCA would support customer contribution for TMI-2 clean-up at the higher level, as provided in the Settlement Agreement in the prior rate case, if the operational criteria set forth in the Settlement is met prior to the decision in this case. In the event that the required operational criteria have not been met, and base rates reflect \$5 million of customer funding for clean-up for Penelec, at the time of the decision, the OCA opposes any increase beyond that level.

The OCA submits that the Commission and the ratepayers have contributed to a level that was a substantial inducement to the other parties to the clean-up plan, particularly the nuclear utility industry, and that the requisite support from other utilities has not been forthcoming. The OCA states that under these circumstances, the increase to the full Thornburgh level, prior to TMI-1's return to service, should be denied as premature. In addition, it says, moving to a full level of "Thornburgh Plan" TMI-2 clean-up may simply signal to other participants a Commission intent for ratepayer guarantee of the total clean-up costs.

The ALJ discussed this matter at length and strongly recommended that the Company's proposal for stepping up to the full Thornburgh Plan level of customer participation should be rejected by the Commission. His comments are as follows:

When the Settlement Agreements in the prior Met Ed and Penelec rate cases (sic), the TMI-1 restart was a central feature as a trigger of ratepayer contributions. It was hoped that any TMI-2 funding by ratepayers would be offset by energy cost savings from the operation of TMI-1. It was strongly urged by the Company that ratepayer contribution would be an inducement to other parties, especially other utilities and Federal authorities, to contribute to the TMI-2 clean-up costs.

But TMI-1 did not return to service as expected. The sizeable ratepayer funding, as an inducement, was made without any offsetting benefits.

The Thornburgh Plan was offered as an equitable sharing of the clean-up costs of TMI-2. The Settlement Agreements in the prior Met Ed and Penelec rate cases purported to provide partial ratepayer contribution under the Plan immediately, with a further ratepayer contribution to full Thornburgh Plan allocation to take effect upon the restart of TMI-1.

The Commonwealth of Pennsylvania, under the Plan, had been earmarked to provide \$30 million at the rate of \$5 million per year. The administration did make provision for that in the budget, and the legislators approved it. The 1983 contribution of \$5 million was appropriated. Through the end of the first quarter of 1983 about \$2 million had actually been received, with the balance to be paid in due time as certain expenditures are made and documentation submitted to the State.

Under the Thornburgh Plan, the State of New Jersey was to provide \$15 million. The first yearly amount was not budgeted by that state and, therefore, was not received. Witness Hafer testified that New Jersey recently appropriated roughly \$2 million for TMI-2 cleanup for the current fiscal year.

The Plan also included a share from the Federal government of \$190 million. Witness Hafer testified that the Department of Energy (DOE) has extended the multi-year program related to TMI-2,

so that the program is now \$159 million. However, of that program value, only \$83 million is estimated to actually be an offset to clean-up costs, well below the \$190 million level proposed by the Plan. Through the end of 1982, the DOE expenditures have offset \$9 million of clean-up costs.

Mr. Hafer testified that the New Jersey Board of Public Utilities, in its order of July 16, 1982, allowed an increase in base rates for Jersey Central to provide for customer participation in TMI-2 clean-up funding at the full level identified in the Thornburgh Plan, at approximately \$12.25 million per year. At the end of 1982, approximately \$5.2 million had been accumulated from ratepayers by Jersey Central for the TMI-2 clean-up.

Met Ed's ratepayer allocation under the Thornburgh Plan would be approximately \$25 million annually. Currently \$16.7 million is now being collected. Through the end of 1982, Met Ed's ratepayers have provided about \$6.6 million of the clean-up funds.

Penelec's ratepayer allocation under the Plan would be approximately \$12.25 million annually. Penelec is, under its Settlement Agreement, collecting approximately \$5 million annually from its customers for the TMI-2 clean-up. By the end of 1982, Penelec ratepayers have provided about \$2.1 million for the clean-up.

Under the Thornburgh Plan, the nuclear utility industry's share is \$190 million. The Edison Electric Institute (EEI) has recommended to its members that they fund \$150 million through a voluntary cost sharing program. However, a trigger of \$100 million had been established in connection therewith, with the understanding that until the \$100,000 [sic] is committed, no money will change hands, and no utility would be obligated on its pledge. This program is underway, by [sic] witness Hafer testified that only between \$50 million and \$60 million in voluntary contributions from the nuclear utility industry has been committed, or only about 50% of the trigger amount. As a result, the nuclear utility industry has contributed not one cent to its \$190 million share under the Thornburgh Plan. We must assume that the allocation by the Thornburgh Plan to the nuclear utility industry was not intended as a charitable contribution, but arose out of the recognition of the intangible benefits to the nuclear utility industry by the TMI-2 clean-up.

Witness Hafer testified that no dollars had been received from the non-investor owned utilities portion under the Plan, and he doubted that any would be.

It should be further noted that approximately \$3.7 million per year over ten years for clean-up will be received from GPU's settlement of its litigation with Babcock & Wilcox.

We agree with the Consumer Advocate that this Commission should leave the ratepayer level of contribution to the TMI-2 clean-up to the current level unless TMI-1 returns to service, or until the nuclear utility industry begins to contribute money for the TMI-2 clean-up and the Federal government increases its funding.

At the last rate case, Company witnesses stressed that ratepayer contribution to TMI-2 clean-up was necessary as an inducement to other parties to contribute toward the clean-up costs. The provision for substantial ratepayer contribution has not resulted in any significant participation from some of the other groups under the Thornburgh Plan, particularly the nuclear utility industry. To now say, as Commission Trial Staff does, that an increase in the level of ratepayer contribution would be an inducement to other groups to meet their Thornburgh Plan allocations, strike a hollow ring.

We agree with Commission Trial Staff's concern with the health and safety interests in the early decontamination of TMI-2, but we are not prepared to place the major responsibility for that concern upon the backs of the ratepayers.

The contention of Trial Staff (as well as that of the Company) that "full participation will not increase customer rates," is deceptive. While it may be true that rates authorized herein will not be impacted, it fails to portray the significant rate burden that will be imposed upon these same ratepayers a few years down the road in the extension of the amortization period of TMI-2.

Nor can we understand the logic of the Commission Trial Staff in stating that the reduction of the annual TMI-2 amortization -- and applying the reduced amortization to TMI-2 clean-up -- will somehow relieve any burden on the ratepayer.

In our view, this Commission should make no change in the level of ratepayers' contribution to TMI-2 clean-up costs for, at least, the following reasons:

1. If TMI-1 returns to service in the near future, as predicted by Penelec, Step 2 under the Settlement Agreement at R-811601 will become activated, and the increased level of ratepayers' contribution will take place, but ratepayers will have offsetting benefits through energy cost savings derived through the TMI-1 operation. This issue, then, would be moot.
2. To increase the ratepayers' level of contribution for the TMI-2 clean-up without TMI-1 restart would modify a good-faith commitment by all parties in the Settlement Agreement at R-811601 beyond its intended purposes, and thereby reneging on the offsetting ratepayer benefits.

Such modification of the Settlement Agreement would be for the sole benefit of the Company to the detriment of its ratepayers -- a one-sided modification.

3. To increase the level of ratepayers' contribution, without offsetting customer benefits, would be unfair and an unreasonable burden on Met Ed's ratepayers disguised by an accounting change to indicate no present impact on rates, without disclosure of the actual significant future impact a few years [down] the road on customer rates.
4. Increasing the level of ratepayers' contribution at this time would create an impression of a ratepayer guarantee of the TMI-2 clean-up costs, and would discourage contribution by some of the other parties from the Thornburgh Plan allocation.

In this connection, the testimony of Witness Hafer is enlightening on what we may expect:

- Q. Mr. Hafer, would you agree that the clean-up plan could be delayed if federal and industry participation is not forthcoming pursuant to the outlines of the so-called Thornburgh Plan?

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- A. Well, I think our clean-up plan anticipates about \$75 million of spending this year and then about \$100 million or so a year thereafter. The customer moneys under the Thornburgh Plan would take care of about half of that, so to the extent that the combination of industry, Federal Government, State Government, insurance proceeds are inadequate to make up the other half, yes, then the program would slip from where we expect it to be.

(Tr. p. 35)

In order to avoid delay in the decontamination of TMI-2 the Companies are frank in stating the path that they would intend to take. In responding to a question as to whether, if shortfalls of contributions from other parties are not forthcoming, or if the electric nuclear utility industry contributions continue to be nil, witness Hafer stated:

But to the extent that the recovery is short of the totality of costs, there unfortunately is no other source to turn to, but those persons for whom the facility was built, the customers.

(Tr. p. 27; Emphasis supplied).

It is interesting to note that Mr. Hafer assigns no responsibility to those who built and operated TMI-2 -- the investors.

- 3.[sic] The Commission's provision in R-811601 for customer (sic) in the TMI-2 clean-up, as a change from the then current policy, was made upon two conditions: (a) participation by all parties included in the Thornburgh Plan in the manner therein set forth; and (b) the restart of TMI-1.

- 4.[sic] A signal must be given by this Commission to State and Federal authorities and to all other parties concerned with TMI-2 clean-up that any increase in the level of ratepayers' contribution (but within the limits of the Thornburgh Plan (sic) is contingent upon TMI-1 restart. It must be impressed upon all that TMI-1 restart and TMI-2 clean-up are interrelated.

This Commission must not be induced -- step by step -- and ever so slowly -- to impose substantially all clean-up costs of TMI-2 (less insurance)

upon the ratepayers. To alter the current ratepayers' contribution would be just that first step.

R.D., pp. 114-119.

Exceptions to the ALJ's recommendation have been filed by both the Company and Staff.

First, the Company disagrees with the ALJ's assessment that to permit the requested step-up in funding would open the door to full ratepayer funding of clean-up. Second, the Company maintains that its requested accounting charge would not stretch the terms of the Settlement Agreement beyond their intended purposes. Finally, Penelec asserts that the ALJ erred by failing to give effect to the clear evidence of record showing the extent to which substantial progress has been made in the clean-up funding program.

The Staff argues that the approval of the Company's request would be consistent with the terms of the original Settlement Agreement; the accounting change proposed by the Company is a relatively painless method of obtaining additional funds today to accomplish the important task of TMI-2 clean-up; and, full participation by Pennsylvania ratepayers would put this national political problem into sharper focus by eliminating any preliminary argument by others that Pennsylvania customers are not paying their fair share towards the cost of TMI-2 clean-up.

We have thoroughly reviewed the ALJ's recommended disposition of this issue and find ourselves unequivocally in agreement with his recommended rejection of the Company's proposal for a step-up in funding, and his rationale for making this recommendation. Further, and by way of his discussion, the ALJ has already addressed the arguments, proposed on exception, by both the Company and Staff. We adopt the ALJ's recommendation and deny the exceptions.

#### 15. TMI-2 Amortization Period

Penelec proposes to retain the current amortization of TMI-2 in its rate proposals.

The OCA submits that the actual amortization for TMI-2 reflected in current rates is no longer necessary and should be extended to a more normal level.

OCA witness Dirmeier commented as follows:

Consistent with my testimony in the last case, I recommend that the investment be amortized over 15 years, without rate base treatment. The reasons for this recommendation include:

1. TMI-2 is not presently used and useful and is therefore not eligible to earn a rate of return.



2. Revenue requirements in the future will include higher return requirements due to the investment in TMI-2.
3. The Company chose a treatment of investment tax credits that withheld some of these tax benefits from ratepayers for the benefit of its shareholders.
4. The treatment of numerous other abandonments, including GPU's forked River, has been to amortize the investment without rate base treatment.
5. The accelerated amortization resulting from the protracted delay in the return of TMI-1 effectively reduces the average amortization period below 15 years.

(OCA St. 2, pp. 13-14).

According to OCA, the current effect of the TMI-2 amortization, which is 6.0 years for Penelec, is to place a disproportionate share of the cost of amortization on ratepayers. Due to Penelec's improved financial position, the OCA recommends a return to what it considers a more normal ratemaking amortization period, which will more appropriately balance ratepayer and investor interests.

In rebuttal, Penelec witness Garland criticized witness Dirmeier's study for failing to account for various tax effects and for failing to exclude land from plant investment (PN Exh. F-R-1, p. 2). The OCA accepted those adjustments which effectively reduced the amortization period to 13.5 years, and reduced the adjustment necessary to attain that level.

In order to reflect an appropriate and more reasonable amortization period, the OCA witness proposed to decrease operating expenses by \$4,046,000.

In referring to the amortization allowed in Penelec's last base rate proceeding at R-811601, Penelec witness Graham stated the following:

The importance of that ratemaking allowance cannot be overstated. It has given Met-Ed the cash needed for its repayment of bank debt in 1982 and for its 1983 bond maturity. It has allowed Penelec to stay in a temporary investment position and to have the funds which will be needed for bond maturities in 1983 and 1984. It will allow Met-Ed to gather the cash it will need for a \$45 million bond maturity in 1985. Equally as important, it, together with the other portions of the settlement, restored confidence in the retail ratemaking for Met-Ed

and Penelec to a point that it allowed limited normalization in the availability of bank credit. This is seen in the terms of the renewed credit agreement.

(PN St. D, p. 33)

The Company maintains that there is no probative evidence to support the OCA's position. Penelec argues that the OCA provides no basis for reducing the presently authorized level of TMI-2 amortization revenues, which has been, and remains, a critical source of cash for the Company and a significant element in reducing the degree of financial uncertainty related to the Company.

In the ALJ's view, OCA witness Dirmeier's treatment of this issue, involves a distorted and clearly erroneous assumption on his part that Penelec intends to include TMI-2 in rate base. After emphasizing that TMI-2 was not included in rate base treatment in the Settlement Agreement at R-811601, the ALJ states that such treatment is not being requested in this proceeding.

The ALJ then acknowledged that the real crux of OCA witness Dirmeier's testimony is that his recommended TMI-2 amortization period would result in a 50/50 sharing of costs between ratepayers and shareholders. Assuming that this is an appropriate ratio for cost sharing, the ALJ agreed with the Company that "the formula he has utilized to derive the amortization period which would produce that result is fraught with problems, and his underlying calculations do not bear analysis". (Penelec Main Brief, p. 20). Furthermore, reasoned the ALJ, OCA witness Dirmeier's procedure for reaching a 50/50 sharing of costs would create confusion, given fluctuations in such components as the assumed rate of return.

The ALJ is of the opinion that the presently authorized level of TMI-2 amortization revenues has been and remains a critical source of cash for Penelec, and a significant element in reducing the degree of financial uncertainty related to Penelec. Although he agreed that Penelec's financial condition has improved and survival may not now be in issue, he concluded that the continued allowance of TMI-2 amortization is essential to the continued financial recovery for Penelec.

Accordingly, the ALJ recommended rejection of the OCA's proposal and retention of the present amortization level as authorized by the Settlement Agreement at R-811601. The OCA excepted.

The OCA contends that the ALJ's refusal to extend the amortization period to a more normal ratemaking level is predicated upon a misunderstanding of the facts and is unsupported. Specifically, the OCA states that its 13.5 year amortization period still places most of the burden for the TMI-2 investment on ratepayers and this extension is not predicated upon the placement of TMI-2 in rate base.

We agree that the Company's financial condition has improved and the threat of insolvency is no longer present. However, the OCA has

failed to persuade us that an extension of the amortization period is warranted at this time.

We adopt the ALJ's recommendation and deny the exception of the OCA.

16. Interest Expense

Penelec, based upon its rate base claim of \$982,372,000 and a weighted cost of debt of 4.27%, utilized an interest expense, related to non-TMI-1 rate base, of \$41,967,000, for the purpose of calculation of income taxes.

With regard to its TMI-1 rate base claim of \$116,705,000 and weighted cost of debt of 4.27%, Penelec has claimed an interest expense of \$4,983,000, for the purpose of calculation of income taxes.

In Pa. P.U.C. v. West Penn Power Co., R-80021082 (January 30, 1981), the Commission said:

We agree that the interest expense deduction should be based upon the weighted debt cost rate . . . applied to a rate base determination . . . in order that customers will pay in rates, a debt interest tax deduction based upon a rate base and debt cost rate therein determined. Since ratepayers are paying higher rates to support higher debt costs, the interest expense deduction, for tax purposes, should also reflect the higher debt interest cost: [Mimeo, p. 36].

Based upon this precedent, the ALJ recommended an adjustment to interest expenses, for the purpose of the calculation of income taxes, based upon his rate base recommendation.

This type of adjustment is customary and routine. We shall adjust the Respondent's interest deduction for the purpose of the calculation of income taxes to conform to our adopted rate base and debt interest costs.

17. Reserve Capacity Credit Expenses

In our rate base determinations, we adopted a rate base reduction which recognized three year amortization of the deferred capacity credit reserve.

The OCA recommends a concomitant reduction in Penelec's expenses of \$9,130,000.

The Staff would reduce Met Ed's expenses by \$6,026,000, based upon five year amortization.

The ALJ recommended adoption of the OCA's proposal and decreased Penelec's operating expenses by \$9,130,000. Exceptions have been filed to this recommendation by both the Staff and the Company.

The Staff's exception does not address the merits of the ALJ's recommendation.

Penelec submits that the recommended flow-back to ratepayers of the accumulated reserve capacity credits cannot possibly be supported as "just and reasonable" ratemaking. Further, Penelec states, the Commission properly held in its Order of July 27, 1981 at R-80051197 that the then current ratepayers were not entitled to the subject reserve capacity credits.

We have already discussed this issue, with specific reference to our July 27, 1981 Order, and adopted the ALJ's recommendation in the rate base section of this Opinion and Order. We have no further comment on this matter. We adopt the ALJ's recommendation and decrease the Company's operating expenses by \$9,130,000. Penelec's exception is, accordingly, denied.

## V. RATE OF RETURN

Penelec, as a public utility, is entitled to an opportunity to earn a fair rate of return on the fair value of its property. Pennsylvania Gas & Water Co. v. Pa. P.U.C., 19 Pa. Commonwealth Ct. 214, 341 A.2d 239 (1975); Keystone Water Company - White Deer District v. Pa. P.U.C., 19 Pa. Commonwealth Ct. 293, 302, 330 A.2d 873, 877 (1975); Riverton Consolidated Water Co. v. Pa. P.U.C., 186 Pa. Superior Ct. 1, 140 A.2d 114 (1958). Rate of return can be defined as:

...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 equity. In other words, the return is the money earned from operations which is available for distribution among the various classes of contributors of money capital.

Public Utility Economics, Paul J. Garfield and Wallace F. Lovejoy (1964), at 116. The return authorized must not be confiscatory, and must be based upon the evidence presented. Pittsburgh v. Pa. P.U.C., 165 Pa. Superior Ct. 519, 69 A.2d 844 (1949).

Although it is acknowledged that the fair rate of return and cost of capital are not always synonymous, we consider the "cost of capital" approach to be one of the important bases upon which a fair rate of return is determined. Lower Paxton Twp. v. Pa. P.U.C., 13 Pa. Commonwealth Ct. 135, 317 A.2d 917 (1974); Pa. P.U.C. v. Duquesne Light Company, R-80011069 (February 20, 1981). In availing ourselves of this generally accepted method of arriving at a fair rate of return, we, the ratemaking authority, first examine the utility's capital structure to identify the sources of the utility's capital and accompanying ratios. We then ascertain the cost of each component; namely, the cost of debt, determined essentially by the annual interest requirement of the utility's bonds, the cost of preferred stock, and, the cost of common stock (common equity), determined by the return required to sell such stock upon reasonable terms in the market. Pa. P.U.C. v. The Bell Telephone Company of Pennsylvania, R-811819 (March 8, 1983); Pa. P.U.C. v. Pennsylvania Power Company, R-811510 (January 22, 1982).

Regardless of the procedure employed in determining fair rate of return, we must exercise "informed judgment". As we stated in Pennsylvania Power:

The return finding should consider the financial costs being incurred, so that the utility has the opportunity to recover its present cost of capital or to attract needed capital at reasonable cost. A fair rate of return for a public utility,

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

Moreover, we must adhere to the legal constraints which guide our decision.

In the landmark case of Bluefield Water Works and Improvement Co. v. Public Service Commission of West Virginia, 262 U.S. 679 (1923), the United States Supreme Court addressed the issue of fair rate of return for a public utility. In Bluefield, the Court stated:

What annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgement, having regard to all relevant facts. 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 in investments in other business undertakings which are attended by corresponding risk and uncertainties; but it has no constitutional rights 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 generally.

Id. at 692-693.

In establishing the standards to be applied in implementing the Federal Natural Gas Act, the United States Supreme Court, in Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944), said:

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The ratemaking process, under the Act, i.e., the fixing of "just and reasonable" rates, involves a balancing of the investor and the consumer interest .... "[R]egulation does not insure that the business shall produce net revenues."  
(Citations omitted)

But such consideration aside, the investor interest has legitimate concern with the financial integrity of the company whose rates are being regulated. From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include services on the debt and dividends on the stock. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. The 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.

As noted in these cases, we are required to approve as just and reasonable, rates which will produce revenues sufficient to enable the utility to recover all reasonable operating and maintenance expenses, depreciation and taxes. Additionally, the utility is entitled to have an opportunity to earn a fair rate of return on the capital invested in the enterprise. Pa. P.U.C. v. North Penn Gas Company, R-80111375 (December 9, 1981). We stated in Pa. P.U.C. v. Philadelphia Electric Co., R.I.D. 438 (February 5, 1979):

Among the factors to be considered in determining a fair return are (1) the earnings which are necessary to assure confidence in the financial integrity of the utility and to maintain its credit standing; (2) the payment of dividends and interest; and (3) the amount of the investment, the size and nature of the utility, its business and financial risks, and the circumstances attending its origin, development and operation.

Finally, we must engage in an appropriate balancing of the rates charged to the customers, for the service provided, with the return to which investors in the enterprise are entitled to have an opportunity to earn.

#### A. Capital Structure

The Company proposed the use of a capital structure consisting of 52.87% long term debt, 13.19% preferred stock, and 33.94% common equity, which represents its capital structure as of the end of the

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future test year, September 30, 1983. No party took issue with the Company's proposal, the ALJ recommended its adoption and, finding it otherwise reasonable and appropriate, we adopt it for use in this proceeding.

B. Cost of Debt

The Company claimed an embedded cost of debt of 8.08%. No party took issue with this claim; the ALJ recommended its adoption and finding it otherwise reasonable and appropriate we adopt it for use in this proceeding.

C. Cost of Preferred Stock

The Company claimed a cost of preferred stock of 8.46%. No party took issue with this claim; the ALJ recommended its adoption and, finding it otherwise reasonable and appropriate, we adopt it for use in this proceeding.

D. Cost of Common Equity

The common equity cost of Penelec involves an element of risk, as a result of the TMI-2 incident and the extended outage of TMI-1, which is not borne by the common equity of other utilities under our jurisdiction (excepting the Pennsylvania Electric Company). All parties presenting testimony on the subject of the cost of common equity acknowledged the existence of this risk element borne by Penelec and by its sister companies. OCA witness Marcus made these comments:

The financial condition of the two companies [Met Ed and Penelec] and their parent company, GPU, are quite unusual. As a consequence of the TMI-II accident in 1979, the earnings of the GPU subsidiaries have fallen sharply. Indeed, GPU reported losses in each year since 1979, and has paid no dividends on its common stock since 1980. Although, GPU's overall financial condition improved in 1982, it continues to face considerable uncertainty. The major areas of uncertainty relate to the cleanup cost of TMI-II and its ultimate use, and to the time when TMI-I will be returned to service. Since no dividends have been paid by GPU since 1979 and their resumption cannot be reliably estimated at present, deriving a DCF estimate for GPU would be an exercise in speculation.

OCA St. 1, pp. III-3 and III-4. The comments of the Company witness Brigham were:

The effects of the accident on GPU's stock price were, of course, profound - GPU's stock price fell from about \$18 per share just prior to the



accident to about \$7.00 per share today; during this period, the prices of other utilities' stocks, and also industrial stocks, were raising sharply.

As of November 30, 1982, GPU's investment in TMI-1 was approximately \$400 million, and its TMI-2 net investment was about \$700 million, for a total TMI investment of about \$1.1 billion. This total represents about 27 percent of GPU's total capitalization. For Met Ed, the percentage is approximately 55 percent of capitalization, for Penelec the corresponding percentage is 22 percent, and it is 15 percent for Jersey Central.

TMI-1 and TMI-2 are now out of base rates and are producing no earnings, but the ongoing capital and operating costs of TMI-1 and TMI-2 must still be met . . . .

\* \* \* \* \*

Based on discussions with utility analysts, reviews of investment advisory reports, and a general knowledge of the way analysts and investors think about risk, I have compiled a listing of specific questions and issues regarding the TMI-2 accident. These factors all have a bearing on investors' perceptions of the riskiness of investing in GPU system securities:

Issues Relating to TMI-1

1. When will TMI-1 be allowed to return to service?
2. How long will it be before TMI's costs are allowed as a part of the company's cost of service?

Issues Relating to TMI-2

1. Will TMI-2 be restored to service or abandoned?
2. How much will this cost, after insurance and taxes but considering financing costs while action is being taken?
3. How long will the action decided upon take for completion?
4. How much will decontamination cost?
5. To what extent will other parties (the Federal Government, state governments, other utilities) share in the clean-up costs associated with TMI-2? . . . .

Penelec Statement G, pp. 18-21.

This subject of the peculiar risk borne by Penelec was also commented upon in the Commission's Opinion and Order in the Company's last general rate increase proceeding (R-80051197) at Pa. P.U.C. v. Pennsylvania Electric Company, 55 Pa. P.U.C. 31, 38 (1981). We shall, of course, again consider and address the subject here.

We have before us for our consideration the testimony of four witnesses. Dr. Eugene F. Brigham, Graduate Research Professor of Finance and Director of the Public Utility Research Center at the University of Florida<sup>21/</sup>, and Dr. Roger A. Morin, Professor of Finance at the School of Business Administration of Georgia State University,<sup>22/</sup> testified on behalf of the Company. Mr. Donald Muth, Chief of the Finance Division, Bureau of Rates,<sup>23/</sup> testified on behalf on the Staff. Dr. Matityahu Marcus, Professor of Finance, Rutgers University, testified on behalf of the Office of Consumer Advocate.<sup>24/</sup>

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- 21/ Dr. Brigham's prepared testimony, Statement G, consists of 43 pages of text, plus schedules and an Appendix.
- 22/ Dr. Morin's prepared testimony, Statement H, consists of 29 pages of text, and 20 accompanying exhibits (schedules).
- 23/ Mr. Muth's prepared testimony, Statement No. 1, consists of 23 pages of text and is accompanied by his Exhibit 1 consisting of 11 schedules.
- 24/ Dr. Marcus' prepared testimony, Statement No. 1, consists of 55 pages of text and 25 accompanying schedules.

The following table summarizes the methodologies and conclusions of the parties:<sup>25/</sup>

Method	Brigham* %	ME Morin %	OCA Marcus %	TS Muth %
Discounted Cash Flow	18.51 <sup>a</sup>	16.74 <sup>c</sup>	14.50 <sup>f</sup>	15.18 <sup>g</sup>
Risk Premium	19.0 <sup>b</sup>	19.29-20.40 <sup>d</sup>		15.45 <sup>h</sup>
Comparable Earnings Earnings/Price		18.5 <sup>e</sup>		15.27 <sup>i</sup>
Recommendation	18.0-19.0 <sup>j</sup>	17.0-19.9 <sup>k</sup>	15.0 <sup>l</sup>	15.3-17.3 <sup>m</sup>

\* The cost rates are the mid-points of witness Brigham's cost ranges.

- a. The 18.51% cost rate is the mid-point of range 17.99-19.03 and includes a GPU/TMI risk factor.
- b. The risk premium is 8.0% (7.75-8.75) plus a Treasury Bond rate of 11%. The 19.0% includes a 2.0% GPU/TMI risk adjustment.
- c. The DCF recommendation is the average for all electric utility groups from a range of 16.28-16.99%. Dr. Morin would add a 2.0% risk increment for Met Ed and 1.5% for Penelec.
- d. The risk premium cost rates include a GPU/TMI risk allowance.
- e. The comparable earnings cost rate is premised upon common equity cost rates for Standard & Poor's 400 Industrials and includes a 1.5% GPU/TMI risk factor.
- f. The 14.5% claim is the mid-point of the range 14.2-14.7%. The OCA adds .5% to the 14.5% to reflect the GPU/TMI risk factor.
- g. The 15.18% is the mid-point of the range 14.65-15.70%. The Staff would add a 2.0% allowance for a GPU/TMI risk factor.
- h. The 15.45% is the mid-point of the range 15.20-15.70%. The Staff would add a 2.0% allowance for a GPU/TMI risk factor.
- i. The 15.27% is calculated upon spot prices for an electric company barometer group and an earnings estimate for 1985-87. The Staff would add a 2.0% allowance for GPU/TMI risk factor.
- j. The 18.5-19.5% range reflects an updating and lower cost of common equity as of April 28, 1983.
- k. The 17.5-20.5% range reflects an updating and lower cost of common equity as of April 28, 1983.

<sup>25/</sup> The American Society of Utility Investors, an association of GPU stockholders, did not present testimony, but endorsed the recommendations of Drs. Brigham and Morin, advocating an allowance of 20-21%.

- l. The 15.0% cost of equity recommendation includes a 50 basis point GPU/TMI risk factor.
- m. The range in the cost of equity recommendation reflects GPU/TMI risk factor.

As is readily apparent, we are presented with a plethora of methodologies and results which underlie the ultimate recommendation of each of the parties. The mass of testimony and supporting schedules, as well as the philosophical dissertations on a multitude of considerations for which we are urged to make an allowance in our final determination, is nearly overwhelming. Because of the sheer bulk of the material before us it is impossible to comment upon, or specifically address, each and every consideration voiced by the witnesses. However, this lack of comment should not be interpreted to be the result of a disregard of the subjects which are not specifically addressed in the discussion to follow.

1. Discounted Cash Flow

All of the witnesses utilized this method in their analyses.

The traditional discounted cash flow (DCF) equation which we have seen is  $k = \frac{D}{P} + g$  where: (1)  $k$  is cost of capital; (2)  $D$  is the dividend; (3)  $P$  is the market price of the stock; and, (4)  $g$  is the growth rate of dividends. Dr. Brigham stated the equation to be  $k = \frac{D_1}{P_0} + g$ , which he refers to as the "Gordon Model, that is often used in rate cases" (Penelec Statement G, p. 34). The difference between this latter statement of the equation and the former is that  $D_1$  is the next period (quarter or annual dividend rather than some historic dividend) and  $P_0$  is a recent price (spot or weekly average) rather than, again, some historic average. Regardless of the equation followed, care must be given to the selection of the dividend, market price and growth rate used in a particular individual analysis. Occasionally, we see that the  $g$  factor is quantified as the growth in earnings rate rather than a growth in dividend rate and, again, sometimes it is quantified based upon a retained earnings rate.

As an approach to quantification of the cost of common equity, the DCF method recognizes that an investor's expectation is that he will receive dividends and, desirably, capital gains upon sale of the investment, as a result of the reinvestment of retained earnings. The objective of the use of the equation is to discover what the investors expectations are, as of a given point in time. A primary caution regarding the use of this form of analysis, and any method which considers the market price of stock, in an attempt to determine the cost of common equity, is that market price may reflect a multitude of considerations and factors in addition to investor dividend and capital gains expectations.

In his DCF analysis Dr. Brigham utilized a group of 22 electric utilities operating in the states of Pennsylvania or New Jersey or a contiguous state, excluding GPU. For these companies he developed an

average market price for the week ending December 17, 1982. His dividend was the average of the 1983 dividend forecasts of Dean Witter; Merrill Lynch, Salomon Brothers, and Value Line. Similarly, his growth rate was the average of the 1983 dividend growth rate forecasts of these same four firms. From the averages for the 22 individual companies he derived a 22 company average dividend yield of 11.54% and an average growth rate of 4.80%, for a total cost of capital of 16.34%. At this point we would observe that there is a valid issue as to whether the December 1982 market price reasonably reflects the entire 1983 dividend. To the extent that it does not, the derived dividend yield would, of course, be overstated.

Dr. Brigham adds a risk element (to his DCF derived cost of capital) to reflect those risks which are peculiar to the GPU companies. He observes that the bonds of the GPU subsidiaries yield 225 to 275 basis points more than those of an average electric utility.<sup>26/</sup> Adding this risk differential Dr. Brigham arrives at a cost range of 18.5-19.5%. We comment here that we have reservations regarding both the development of Dr. Brigham's bond premium and the direct application of a bond yield premium to common equity.

As an alternative quantification of the risk premium, Dr. Brigham utilized the differential between the GPU beta and the 22 company average beta which developed a risk increment of 2.29%, which when added to his DCF developed cost of 16.34% becomes an 18.63% cost rate for GPU. Assuming that Met Ed's cost is 50 basis points above that of the other subsidiaries, Dr. Brigham developed a cost for Penelec of 18.51% with a standard deviation of .52%, giving a cost range for Penelec of 17.99-19.03%, all as indicated in our table above.<sup>27/</sup>

Dr. Morin also utilized the DCF methodology and, in doing so, relied upon the form of the equation which has been described above as the Gordon Model. Dr. Morin, as did Dr. Brigham, used a group of comparison companies in the development of his analysis. His comparison group is a group designated by Value Line as "Electric Utilities - East". This group of 34 companies (excluding the GPU group) includes eastern electric utilities whose shares are publicly traded. Dr. Morin, while admitting that substantial differences in characteristics may exist between these companies, asserts that "they are all subject to similar kinds of economic and regulatory risk, and that the average risk and return of the group can be used as a starting point in estimating GPU's cost of equity". (Met Ed Statement H., p. 12).

<sup>26/</sup> It is not clear precisely how Dr. Brigham derived this differential (See Penelec Statement G, p. 31). Dr. Brigham there speaks of the average utility bond rating of A, a Baa/BBB yield of 75 points over A yields and a Penelec-Jersey Central yield 200 points over Baa/BBB bond yield, without reference to his 22 comparison companies.

<sup>27/</sup> Dr. Brigham cautions that his derived cost does not include an increment for market pressure and flotation costs.

Dr. Morin derived what he described as the current dividend yield for his group, which is the ratio of the closing market prices on December 9, 1982 and the "current indicated dividend rate" (Statement H, p. 13). The average dividend yield for the group of 11.00% is shown on Statement H, Exhibit RAM-5, page 1. Dr. Morin provides historic dividend growth rates for each company and group average which are: 5 year - 5.19% and 10 year -3.60%, from which he derived an average growth rate of 4.40%.<sup>28/</sup> We note here that Dr. Morin states that 10 year and 5 year averages must be calculated because the "period must be long enough to avoid undue distortions by short-term aberrations" (Statement H, pp. 13-14). This must be contrasted with Dr. Brigham's use of the projected 1983 dividend growth estimates.

The sum of Dr. Morin's dividend yield and growth rate is 15.40%. Dr. Morin did not stop here but then adjusted his 11.00% dividend yield by multiplying the dividend yield by 1.044 to reflect an expected dividend yield rather than a spot figure. The adjusted yield of 11.48%<sup>29/</sup> and the 4.40% growth rate results in an indicated cost rate of 15.88%.<sup>30/</sup> Our comments here are first, that the December 9, 1983, is a spot market price, which may or may not reflect "normal" conditions, and second, that such spot market price may not, and probably does not, in our view, fully reflect a dividend growth adjustment of this magnitude, with the consequence that the dividend yield is substantially overstated.

Dr. Morin next examined a group of seven Pennsylvania-New Jersey jurisdictional utilities. From data for these companies, using the methodology described above he developed a "current" dividend yield of 11.60%. The average of the 5 and 10 year growth rates was 2.93%. Dr. Morin then says that when "the minimal growth rate of the group of 4.0% is combined with the spot dividend yield adjusted to obtain the expected dividend yield, the expected return on common equity for the

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28/ Based upon 1982 authorized returns and 1981 retention ratios for the 34 company group Dr. Morin found that the indicated growth rate would be 3.85 - 4.89%, with a median type value of 4.0%.

29/ In Exhibit RAM-9, page 1, Dr. Morin calculated the DCF result based upon the 4.0% growth rate as:

$$11.00\% \times 1.040 = 11.44\% + 4.00\% = 15.44$$

30/ An adjustment to dividend yields of one-half the annual growth rate would fully recognize the dividend increase over a one year period assuming that the increase were uniform over the period. The use of the full annual increase is equivalent to giving recognition to the dividend increase over a prospective two year period.

group is 15.14%".<sup>31/</sup> (Statement H, p. 16) (Emphasis added). The formula is solved in Dr. Morin's Exhibit RAM 10, page 2 as follows:

$$11.86\% \times 1.0293 = 12.21\% + 2.93\% = 15.14\%$$

If the current dividend yield of 11.6% is used the result is as follows:

$$11.60 \times 1.0293 = 11.94\% + 2.93\% = 14.87\%$$

In his Exhibit RAM-11, Dr. Morin used the average authorized rate of return for his seven companies in recent cases, of 16.17% and an earnings retention rate of 22% to derive a growth rate of 3.56%, which when combined with "the expected dividend for the group produces an expected return on equity of 15.84%"<sup>32/</sup> (Statement H, p. 16).

Dr. Morin also developed a DCF result from Value Line's Composite Industrial Index of 16.2% utilizing a 1982 dividend yield of 4.2% and a 12.0% growth rate.<sup>33/</sup>

In his summary table at page 20 of his prepared testimony, Statement H, Dr. Morin has further adjusted his dividend yields by 5% to account for market pressure and flotation costs,<sup>34/</sup> thereafter adding back his growth rate. He further adjusts this total by adding .50% to account for the quarterly receipt of dividends.<sup>35/</sup> For example, the 15.88% reached for his 34 electrics was comprised of a growth adjusted dividend yield of 11.48%. This is then divided by .95 to adjust for market pressure and flotation costs, to become 12.08%. The growth component of 4.40% is added and the new total return is 16.48% rather than the 15.88% initially reached. Then .50% is added as a quarterly dividend adjustment for a new total cost of 16.98%. All of Dr. Morin's

31/ The derivation of the spot dividend yield of 11.86% as distinguished from the current dividend yield is not explained.

32/ The expected dividend yield which must have been used to obtain this result is 12.28%. The source of this figure is unexplained. We also conclude that, for a multitude of reasons, we cannot accept any calculation based upon equity earnings authorized by regulatory bodies.

33/ We find little probative value in the common equity cost rates of industrial enterprises.

34/ This subject will be separately addressed.

35/ We are not satisfied, based upon the two short paragraphs of explanation of this adjustment that it is required.

previously stated results were similarly adjusted and resulted in a range of results of 16.28-16.99% with a mean of the individual results of 16.74%.

Finally, based upon the approximate 2.5% spread of yields between Penelec's bonds and Standard & Poor's BBB bond average for the first eleven months of 1982, and a current spread of 2.0% between Penelec bonds and other Pennsylvania utility bonds, and similar spreads of 1.5 - 2.0% for Met Ed's preferred stock in December 1982, Dr. Morin adjusts Penelec's DCF indicated costs upward by 1.5% or to a range of 17.78 - 18.49%.

In his DCF analysis, Staff witness Muth (Staff Statement No. 1 and Staff Exhibit No. 1) selected a group of six electric utilities using criteria of: (1) location in the northeastern United States; (2) investor supplied capital of \$750 - \$2,500 million; (3) deriving 80% of gross revenues from electric sales; and, (4) significant nuclear generation either in service or under construction. His stated objective was to select companies with risks similar to that of Penelec. Mr. Muth also used the Gordon Model of the DCF formula, which we have described above.

In his Schedule 7, Mr. Muth, using the "latest indicated dividend", sets forth a 52 week average dividend and a spot dividend yield as of April 22, 1983. The 52 week average dividend yield for his comparison group is 11.99% and his spot dividend yield is 10.79%.

Regarding growth rates, Mr. Muth, on page 2 of his Schedule 7, has set forth 10 year and 5 year historic data and Value Line's estimated 1985-1987 data, regarding growth in earnings, dividends and book value. Additionally, for each of his comparison group companies he has set forth Solomon Brothers projected 5 year normalized growth in earnings estimates.

On page 3 of his Schedule 7, Mr. Muth sets forth his DCF calculations, as to each of his comparison companies, utilizing spot dividend yields and his growth rate estimates. In making his calculations, Mr. Muth adjusted the dividend yields upward to recognize one-half the estimated growth rate.<sup>36/</sup> This latter adjustment, according to Mr. Muth, gives some recognition to the timing of dividend payments, as well as the interval between increases in dividends. The results reached by Mr. Muth for his comparison companies yield a range of 14.65-15.71%, with a midpoint of 15.18%.<sup>37/</sup>

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<sup>36/</sup> This is contrasted with Dr. Morin's adjustment utilizing the full growth rate.

<sup>37/</sup> Mr. Muth did not derive an average growth rate for his comparison groups but derived a range of DCF results for each and then averaged these results to arrive at his 14.65-15.71% range. If an average growth rate had been derived for Mr. Muth's comparison companies it would be 3.67-4.67%.



In his DCF analysis OCA witness Marcus started with a group of 94 electric utilities which consists of the largest third of all electric utilities listed on the New York Stock Exchange. After the exclusion of GPU and Consolidated Edison, the utilities were segregated into three size groups based upon 1981 revenues. Since GPU's size would place it in the largest group, he utilized this group in his analysis. From the dividend yields for the largest utility group Dr. Marcus developed a twelve month average of 11.26% and used 11.25% in his analysis.

For a growth rate Dr. Marcus developed 5 year and 10 year growth rates for book value, earnings per share and dividends for his comparison group. He observes that "the average growth of book value, dividends, and earnings for 1972-82 and 1977-82 is 3.07 percent, and the average earnings growth alone is 3.13%<sup>38/</sup> (OCA Statement 1, pp. III-11 to III-12).

As an alternative method of quantifying or estimating growth rates, Dr. Marcus examined earnings and retained earnings rates for the group and developed growth rates ranging from 3.78% for the 1979-1982 period, to 3.71% for the year 1982 above, with most values in the 3.3-3.4% range.

From this analysis, Dr. Marcus concludes that growth prospects for the largest utility group fall in the 3.0-3.5% range and he selects a rate of 3.25% to use in his analysis. This resulted in an overall indicated return of 14.5%.<sup>39/</sup>

Regarding the subject of additional risk for Met Ed, Dr. Marcus believes that the approach of Drs. Brigham and Morin, that is, bond yield differentials, is invalid. Additionally, he sets forth data in his Schedule MM-19 which indicates that currently there is essentially no differential for Met Ed in the first three months of 1983, which in his view suggests that no risk premium is being demanded by investors.<sup>40/</sup> However, he suggests a risk premium for Penelec of .50% for a total cost of common equity of 15.0%.

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<sup>38/</sup> We note that the average growth rate for dividends alone is 4.85%. Dividend growth however, is a function of deliberate dividend declarations. We have found that dividend growth rate greater than indicated by growth in earnings rates are not long sustained. In our view earnings growth rates have greater weight.

<sup>39/</sup> Dr. Marcus developed a DCF return for Standard & Poors 400 Industrials in a similar manner and arrived at a conclusion of 14.2-14.7%.

<sup>40/</sup> Based upon the rebuttal testimony of Dr. Brigham we have grave reservations regarding the validity of this analysis.

## 2. Risk Premium

This methodology has as a premise that the cost of capital is comprised of three elements: (1) pure interest; (2) an inflation factor; and, (3) a premium for the risk involved in the investment. Dr. Brigham also presented the results of his risk premium analysis.<sup>41/</sup> For the risk free cost of capital plus inflation premium, Dr. Brigham selected a cost of 11.0% based upon the long term Treasury Bond rates in mid-December 1982.

For the risk component, Dr. Brigham relied upon data developed in an ongoing study at Florida's Public Utility Research Center. Basically the risk premium which he used is based upon the difference between the averages of estimated rates of return for the Dow Jones Electrics and the returns on their bonds.<sup>42/</sup> From this study, Dr. Brigham concludes that the risk premium for the average utility is currently in the 5-6% range. Based upon the yield of Penelec bonds over Baa/BBB bonds of 200 basis points, which together with a premium of 75 basis points for the yields of Baa/BBB bonds over A bond yields indicated a risk premium of 7.75 to 8.75% for Penelec, Dr. Brigham derives a conservative risk premium estimate of 8.0%. From this Dr. Brigham arrives at his risk premium conclusion for Penelec of 19.0%.<sup>43/</sup>

Dr. Morin presented the results of his risk premium analysis. In order to develop a risk premium factor, Dr. Morin essentially estimated the expected equity returns for the period 1972-1982, for the overall equity market as represented by Value Line's Composite Market Index, using the DCF method. From his estimated cost he subtracted the yield on Moody's Newly Issued Corporate Bonds Composite, which resulted in his indicated risk premium.<sup>44/</sup> Although Dr. Morin has developed a

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<sup>41/</sup> This method has been presented and discussed in some proceedings under the term "bare rent".

<sup>42/</sup> We conclude that this type of analysis is entirely circular in that the validity of the risk premiums derived is entirely dependent upon the validity of the estimated rates of return derived in the first instance.

<sup>43/</sup> As noted previously, Dr. Brigham revised his recommendation downward by .50% on April 28, 1983, based upon more current cost data.

<sup>44/</sup> In developing his estimated cost of equity using the DCF method Dr. Morin utilized a spot yield, adjusted by the full growth rate, which adjustment we have previously questioned. We have also previously commented upon the circularity of this type of approach.

1972-1981 average of 4.32% and a 1977-1981 average of 5.56%, we note that the 1980-1982 average is 3.167%.<sup>45/</sup>

Taking his derived 4.32-5.56% risk premium range, Dr. Morin multiplied it by Value Line's Estimated GPU Beta of 0.90. A resulting indicated risk premium range of 3.89-5.00% is derived, with, in Dr. Morin's view, a conservative mid-point of 4.45%. This, then, is Dr. Morin's conclusion as to GPU's equity risk premium over its bond yield.

Dr. Morin then states that Penelec's publicly held bond issues were yielding 15.40% as of December 7, 1982<sup>46/</sup>, and that the indicated equity cost for Penelec is, therefore, 19.29 to 20.40%. We should observe that essential to the validity of the risk premiums developed by Dr. Morin is the validity of his initial estimated equity returns. If for some reason his DCF estimated returns are overstated, his risk premiums will be overstated, as will be his risk premium indicated cost of common equity.

Mr. Muth also presented a risk premium analysis. His methodology was to develop a DCF indicated cost of common equity for his six comparison companies, which he then averaged for each of the years 1978 through 1983. The yields on ten year Treasury bonds were deducted, resulting in premiums ranging from a 1979 high of 4.51% to a 1983 low of 2.45%. Excluding the apparently unusual years of 1981 and 1982, Mr. Muth's average premium is 4.20% from which he estimated a reasonable prospective range of 4.0-4.5%. Adding this risk premium to his estimate of prospective Treasury bond future yields of 11.20%, resulted in Mr. Muth's 15.20-15.70 risk premium range and midpoint of 15.45%.

### 3. Comparable Earnings

Dr. Morin states that in our search of companies of comparable risk, similarity of operations, product lines, or environmental conditions are not relevant. What is relevant, in his view, is business risk and financial risk taken together. He states that the appropriate objective measures of such risks are the beta coefficient and standard deviation of return.

Since GPU has a beta of almost one (0.90), which is by definition the beta of the market as a whole, it is appropriate, according to Dr. Morin, to examine the book returns on equity realized by a composite of industrial companies. Dr. Morin also notes that while the standard deviation of the average stock is less than 5%, GPU's standard deviation is 5.034%. He then opines that the true fundamental beta of GPU is

<sup>45/</sup> We also note that the individual figures from which the averages are derived vary from -0.11% to +8.23%.

<sup>46/</sup> We note however that while Dr. Marcus, in his schedule MM-19 reflects a December 1982 yield of 16.7%, also shown are January, February and March 1983 yields of 15.18%, 15.10% and 13.85%. We therefore question the appropriateness of Dr. Morin's use of his spot 16.0% figure.

likely to be in excess of one.<sup>47/</sup> Dr. Morin also expresses the view that it is more appropriate to examine the earnings of the industrial companies in order to avoid circularity.

Dr. Morin provides quarterly returns on book equity for the Standard & Poor Index of 400 Industrials by quarter, for 1980, 1981 and the first two quarters of 1982. The averages were: 1980 - 17.56%; 1981 - 16.93%; and 1982 - 14.09%, with a quarterly average for the entire period of 16.61%. Dr. Morin then states that if these rate of return figures were restated in terms of average common equity, the figures would be approximately .50% higher or about 17.0%.<sup>48/</sup>

Then, stating that the current risk situation of GPU and its subsidiaries exceeds that of the average stock, Dr. Morin concludes that the allowed return for Penelec should exceed the 17.0% which he has derived. To recognize this additional risk, Dr. Morin adds the 1.5% risk differential<sup>49/</sup> between the yields on GPU bonds and the average utility bonds. The conclusion reached by Dr. Morin in his comparable earnings analysis is a 18.5% return for Penelec.

#### 4. Earnings/Price Ratios

While recognizing that the E/P Ratio method may understate or overstate the cost of common equity because current earnings used in the calculation may be greater or lesser than the expected earnings reflected in the market price, Mr. Muth offers this method as additional evidence of the appropriate cost rate for common equity.

Mr. Muth provided four measures of E/P ratios for his six comparison utilities:

1. Estimated 1983 earnings/52 week average stock prices = 15.30%.
2. Estimated 1983 earnings/spot prices on 4/22/83 = 13.78%.
3. 1985-1987 estimated earnings/52 week average stock prices = 16.94%.
4. 1985-1987 estimated earnings/spot prices = 15.27%.

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<sup>47/</sup> Dr. Morin does not inform us what he means by GPU's "true fundamental beta" as distinguished from the 0.90 which he has furnished and employed in his testimony in a variety of manners.

<sup>48/</sup> The basis for this statement is not provided by Dr. Morin.

<sup>49/</sup> Not explained by Dr. Morin is why the 2.0% yield differential between GPU bonds and the average utility bond, whose yield should be below that of the average industrial bond, should be considered to be an appropriate quantification of the risk which he seeks to recognize.

Mr. Muth suggests that the last of the measures which he has provided (15.27%) is the most appropriate one to consider.

5. Market Pressure/Flotation Costs

In discussing the necessity for a flotation cost adjustment, Dr. Brigham hypothesizes a purchaser of a share of stock (which is obviously a share of a new stock issue) who pays \$100 and expects earnings of \$15. In the example given, the actual \$95 net proceeds of the sale must earn 15.79% to provide \$15 of earnings.<sup>50/</sup> Notwithstanding the fact that no new offerings are planned by GPU, Dr. Brigham states, without explanation or elaboration, that an issuance cost adjustment is required. He further states that studies which have been done at the University of Florida (based upon unstated assumptions and considerations) suggests that the adjustment should be 50-60 basis points.

Dr. Morin also proposed what he termed an underpricing allowance, consisting of "the sum of market pressure, cost of flotation, and underwriting fees associated with a new issue." (Penelec Statement H, p. 17). After stating that these costs occur in relation to a new stock issue, Dr. Morin flatly asserts that "the affect of the total allowance for underpricing must be added to the rate of return on common equity to obtain the final cost of equity financing." (Id., p. 17). Dr. Morin continues and states, with further explanation or elaboration, that "since flotation costs are not expensed when incurred, they must be recovered in the future, in the same way that the flotation expenses of a bond issue are recovered over the life of the bond, irrespective of any new bond issue in the future."<sup>51/</sup> (Id., p. 17).

Dr. Morin's conclusion regarding a proper allowance is that it must compensate for costs which approximate 5% of the gross proceeds of the sale. He states that he, therefore,<sup>52/</sup> customarily divides the dividend yield (in a DCF analysis) by .95.

The testimony of Staff witness Muth is silent on the subject of an allowance for market pressure and flotation costs.

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50/ Dr. Brigham does not provide an example regarding a purchaser of an older issue, and a corresponding need.

51/ Dr. Morin's statement with regard to the recovery of flotation costs suggests to us that at some point in time they will be fully recovered. However, he does not address the subject of the unrecovered nature of these costs in his testimony.

52/ Why the dividend yield alone is adjusted when, seemingly, total earnings should be adjusted, is unexplained. Also far from clear to us is why Dr. Morin's underpricing allowance is required in a DCF analysis, but apparently not required in his comparable earnings and risk premium allowances. In all of these analyses the derived equity cost rate is to be applied to a book value. Why is not the need or absence of need for an adjustment consistent?

The OCA witness Marcus states his opinion that such an allowance is to compensate the utility for the costs incurred in the sale of new common equity issues, and that such costs are only justified where a utility is expected to sell common equity to the public in the near future. Under the circumstances here, his view is that such an allowance is not warranted.

In past proceedings we have frequently been urged to recognize market pressure and flotation costs and to grant an additional allowance for such elements in our determination of a fair return for common equity. We have routinely denied such an allowance for a number of reasons, all of which have not necessarily been recited in each instance. In Pa. P.U.C. v. Peoples Natural Gas Co., 52 Pa. P.U.C. 616, 637 (1978); Pa. P.U.C. v. T. W. Phillips Gas and Oil Co., R-811615 (1982), at mimeo, p. 28; and, Pa. P.U.C. v. Pennsylvania Electric Co., 55 Pa. P.U.C. 31, 36 (1981) the Commission denied an allowance because there was no prospective stock issuance in the feasible future. In Pa. P.U.C. v. Philadelphia Electric Company, R-811626 (May 1982), at mimeo, p. 54; and Pa. P.U.C. v. Penn Power, 55 Pa. P.U.C. 552, 585 (1982), we stated, in general, that we are of the view that the prospective issuance of new common stock is a common experience for investors and that we were not satisfied that the investor's assessment of flotation costs and market pressure, and the effect that such occurrence will have upon their perspective return, is not already reflected in the market price of the stock of any enterprise. Consequently, we have not been satisfied that recognition of these costs, by way of a special additional authorized earnings increment, is necessary. In this proceeding, the essentially bare assertions of the Respondent's witnesses Brigham and Morin, that market pressure and flotation costs must be recognized by an additional increment in the authorized earnings for common equity, even though no new common stock issue is contemplated, leaves us unconvinced that such an allowance is required. Consequently, we shall make no such allowance in our determination here.

## 6. Discussion

Having reviewed the testimony and data presented by the witnesses for the Company, the Staff and the OCA, we find, not unexpectedly, that we cannot accept the specific recommendation of any particular witness. We shall discuss the testimony of the witnesses only to the extent necessary to inform the reader regarding the method by which we have arrived at our conclusions.

### a. DCF

The witnesses have employed a variety of approaches in deriving a dividend yield. Dr. Brigham used an average of the forecasts of various investment advisory services and a one week average stock price as of December 17, 1982,<sup>53/</sup> and developed a yield of 11.54%.

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<sup>53/</sup> It is obvious that any dividend forecast must assume some level of dividend growth. We note that Dr. Brigham did not suggest any growth rate adjustment for his dividend yield.

Dr. Morin developed his dividend yield from the current dividends and a spot market price, and derived a yield of 11.00% for his 34 company group, which he proposed be adjusted by the full annual growth rate for an adjusted yield of 11.48%. Dr. Morin developed a similar current yield of 11.60% for his seven company group, which be similarly adjusted to 11.94%. Another dividend yield of 11.86% for this group was adjusted to 12.21%. Dr. Morin also proposed a further adjustment to his results of .90% to take into account the quarterly nature of dividend payments. Mr. Muth's comparable spot dividend yield was 10.79%, which he recommended be increased by one half of the annual growth rate to recognize dividend payment timing.<sup>54/</sup> Dr. Marcus developed a 12 month average dividend yield of 11.25% from an array of figures. Considering the more recent market price data used by Mr. Muth and the fact that there is a serious question regarding how adequately a spot market price recognizes future dividends growth, we believe that a dividend yield of 10.75-11.00% is a reasonable figure to utilize on our derived results.

Based upon the advisory service forecasts, Dr. Brigham derived an average growth rate of 4.80%. Dr. Morin developed a 5 year average growth rate of 5.19% and a 10 year average of 3.60% and an average of the two averages of 4.40% for his 34 company group, and a similar average for his 7 company group of 2.93%. We put little credence in Dr. Morin's retained earnings derived growth rate of 3.56%. Mr. Muth's judgmental growth rates would, as we have noted above, yield growth rates of 3.67-4.67%. Dr. Marcus recommended the use of a 3.25% growth rate. Again we find an array of figures. We note that both Mr. Muth and Dr. Marcus considered growth in earnings and growth in book value, as well as growth in dividends. We believe that, to some extent, it is appropriate to consider earnings growth and book value level to ensure that growth in dividends are supported by earnings and increases in book value, and do not merely reflect an overly liberal dividend policy. Based upon the figures, and testimony we believe that a growth rate expectation of 3.50-4.00% is reasonable.

Our conclusion then leads us to a DCF indicated rate of earnings in a range of 14.25-15.00%, without consideration of the risk peculiar to Penelec by reason of the TMI situation.

b. Risk Premium

Dr. Brigham used the long term Treasury Bond yield, as of mid-December 1982, of 11.00%, for his risk free rate. Dr. Morin did not employ a risk free rate in his analysis. Mr. Muth offered as a risk free rate the 11.20% average of the prospective Treasury Bond futures yields for the March-December 1985 period.

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<sup>54/</sup> Utilizing a reasonable growth rate of 4.0%, Mr. Muth's adjusted spot dividend yield would be 11.01%.

We are accustomed to seeing Treasury Bond yield rates offered as the best evidence of a riskless rate, for the pure interest and inflation factor components of a risk premium analysis. Of the two rates before us, offered by Dr. Brigham and Mr. Muth, we opt for the rate of 11.00% proposed by Dr. Brigham, because in our view the futures market contract yields on Treasury Bonds have included, in them, a carrying cost until the time of future delivery under the contract.

Dr. Brigham and Mr. Muth each developed a risk factor in much the same manner. Dr. Brigham relied upon the results of an ongoing study at Florida's Public Research Center, which has developed data regarding the difference between estimated rates of return for Dow Jones Electrics and the yield on their bonds. Dr. Brigham's results were a spread of 5-6%. Mr. Muth calculated the difference between his estimated DCF returns for his comparison group and the yield on 10 year Treasury bonds. The range produced was 2.45-4.51%. Eliminating the apparently unusual years of 1981 and 1982, the average differential became 4.20%, from which he recommended the use of a range of risk of 4.0-4.5%.

Both of these analyses suffer from the same infirmity, which is that their validity is dependent upon the validity of the estimated returns. Additionally, the exercise is one in circularity, for a return is first estimated, then the cost of a less risky investment is subtracted and then the cost of a less risky investment is added back. The exercise also assumes that the risk premium remains constant through any time change, and the final result will differ from the starting point, only if the less risky cost changes over time, or if the less risky investment cost subtracted differs from that which is added back.

Dr. Morin's risk premium was calculated in a somewhat similar manner. He developed historic returns for the 1972-1982 period for the entire equity market and then deducted the yields on Moody's Corporate Bonds. The average differential for the 1972-1981 period was 4.32% and for the 1977-1981 period was 5.56%. This was then reduced by multiplying by Value Line's estimated GPU beta of .90%, yielding a result of 3.89-5.00%, with a recommendation that the mid-point of 4.45% be utilized. Dr. Morin then proposed that this equity over bond premium be added to the 15.4% yield on Penelec bonds in December 1982. While Dr. Morin apparently recognizes that the risk premium of equity over bonds for the entire equity market is not directly transferable to utility equity investments, the validity of his result is entirely dependent upon the validity of Value Line's estimated beta for GPU. We find ourselves extremely uncomfortable in being required to rely so greatly upon that estimate. We conclude, therefore, that we must reject Dr. Morin's risk premium analysis.

Having reviewed the data, we find ourselves with little data of probative value as a result of the risk premium analyses presented. Were we to employ the frequently used equity risk premium of 4-5%<sup>55/</sup>, which we have employed in other proceedings, the indicated result would be a range of 15.0-16.0%.



c. Comparable Earnings

A basic premise of Dr. Morin's analysis is that the usual considerations regarding relative risk, such as product line, market share, capitalization rates etc., are irrelevant since all business and financial risks are measured by beta coefficients and standard deviation of return. Although we are not satisfied that this is necessarily true, Dr. Morin goes on to state, in essence, that since GPU's standard deviation exceeds that of the market as a whole, Value Line's estimated beta for GPU of .90 is probably incorrect and that in truth it exceeds 1.0.

Dr. Morin then develops an average return for Standard & Poor's 400 Industrials. He opines that the result of 16.61% is probably understated, and that if stated on an average equity basis the result would be in excess of 17.0%. To this result, Dr. Morin would add 1.5% to reflect GPU's peculiar risk to reach a cost of 18.5%.<sup>56/</sup>

Our review of Dr. Morin's comparable earnings analysis leads to our conclusion that it is of little of probative value.

d. Earning/Price Ratios

In recent proceedings we have criticized and commented at length upon the infirmities of the earnings/price ratio method. In this instance, Mr. Muth recommends the result of 15.27% derived from his 1985-1987 estimated earnings and spot prices. We note that the result of 1983 estimated earnings and spot prices, is only 13.78%. The validity of the results depends of course upon the accuracy of earnings estimates and the degree to which those estimates, particularly for the 1985-1987 period, are reflected in current market prices. We would be inclined to the conclusion that a result approximating the mid-point of the two figures derived, or 14.5%, might be a more nearly correct result. However, we conclude that we should accord this analysis little probative weight.

e. Conclusion

We conclude that the best indicators of Peneléc cost of common equity are the DCF results of 14.25-15.00% and the risk premium results<sup>a</sup> of 15.0-16.0%. Of the two analyses, we would place more weight upon the DCF result and are inclined toward a range of 14.5-15.5%.

As a GPU/TMI risk element, Dr. Brigham urges upon us an allowance of 225 basis points, based upon the differential between the bond yield of the GPU subsidiaries and those of the average electric.

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<sup>56/</sup> Dr. Morin does not explain why GPU's risk is not already reflected in his all risk reflective beta and standard deviation for GPU.

Dr. Morin, utilizing his beta approach, developed a GPU risk factor of 2.27%. However, he has apparently settled upon a risk element of 1.5% for Penelec. Mr. Muth's GPU/TMI risk premium was also developed from a comparative bond yield analysis from which he derived a recommendation of 2.0%. Dr. Marcus recommended a judgment allowance of only .5%.

Excluding Dr. Marcus' judgment allowance of .5%, the range of GPU/TMI risk allowance urged upon us by the witnesses ranges from 1.5% to 2.25% which, in reality, is depreciated somewhat by the witnesses' specific final recommendation.

In the Commission's most recent Opinion and Order involving a fully contested general rate increase application by the Respondent,<sup>57</sup> the Commission allowed a special risk increment of 1.5%. Based upon that allowance, the general improvement in Penelec's financial condition in the interim, and our conclusion that the relative risk of a GPU equity investment is somewhat less than that of a bond investment, we are persuaded that an additional risk allowance of 1.25% is appropriate. This allowance then yields a reasonable range of earnings for common equity of 15.75-16.75%. Based upon this range we select a precise figure of 16.25% upon which to establish an overall rate of return and rates in this proceeding.

Our overall authorized return is the derived as follows:

	<u>Capital Structure</u>	<u>Cost Rate</u>	<u>Weighted Cost</u>
Long Term Debt	52.87%	8.08%	4.27%
Preferred Stock	13.19%	8.46%	1.12%
Common Equity	33.94%	16.25%	5.52%
Total	<u>100.00%</u>		<u>10.91%</u>

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57/ Pa. P.U.C. v. Pennsylvania Electric Co., 55 Pa. P.U.C. 31, 38 (1981).

## VI. RATE STRUCTURE

### A. Cost of Service

The Staff has not taken issue with Penelec's cost of service study. The OCA, Bethlehem, and the Industrials have taken issue with only a few items in the cost of service study.

#### 1. Distribution Plant

In its cost of service study, Penelec, as is generally customary, and recommended by the NARUC Electric Utility Cost Allocation Manual, has classified its Distribution Plant as demand and customer related. The customer component was quantified through a minimum grid study, based upon minimum sized installations on a year by year basis. Customer costs were allocated to classes on a customer basis. Demand costs were allocated to classes on a non-coincident demand basis.

OCA witness Oliver took issue with the Company's methodology asserting: (1) that some costs should be classified as energy related; (2) that the minimum grid customer classification methodology results in double counting of those customer demands which are satisfied by the minimum grid; and, (3) that the minimum grid is itself inconsistent. The OCA argues that Met Ed's classification of a minimum grid as customer related results in placing excessive high costs, and thereby excess revenue requirements, upon the residential class.

OCA witness Oliver proposes to classify distribution plant and related expenses, with the exception of meters and service drops, as demand and energy related. Thereafter, Mr. Oliver proposes to allocate his demand/energy classified costs on a combined non-coincident demand/average demand basis.

The Staff endorses the Company's methodology and Bethlehem, the Industrials and the Hospitals specifically oppose the OCA witness' proposals. The ALJ rather severely faults the OCA witness' proposals and recommends against the OCA's position.

The OCA has excepted, essentially reiterating its arguments on brief, which we have heard on many prior occasions and uniformly rejected. Pa. P.U.C. v. Duquesne Light Co., R-811470, April 15, 1982; Pa. P.U.C. v. Duquesne Light Co., R-821945, January 27, 1983. We remain unsatisfied that any portion of Distribution Plant should be classified as energy related. While it is true that Distribution Plant performs the function of delivering energy, the fact remains that the sizing of Distribution Plant is entirely the result of the need to meet the maximum demands placed upon the various portions of the system. Similarly, we are satisfied that the portion of the distribution system investment (beyond meters and service drops) is partially a function of numbers of customers. Consequently, we deny the OCA's exceptions and accept the Company's allocation of distribution plant.

## 2. Customer Accounts Expense

OCA witness Oliver also took issue with Penelec's allocation of Customer Accounts Expense. The specific issue was the allocation of Uncollectible Accounts Expense. Mr. Oliver stated that the Company's response to an interrogatory indicated that not data regarding write offs by customer class is maintained. The OCA is concerned that too great a portion of this expense is being allocated to the residential class. Since the OCA concedes that there is insufficient data upon which to fashion a remedy in this proceeding, it recommends that Penelec be required to perform a study, in order to have some basis, other than judgment, upon which to allocate this expense.

The ALJ recommended that the suggested study be required, and that it be performed and available for Penelec next general rate increase proceeding.

Penelec has excepted, stating that while it intends to perform such a study, preliminary estimates of manpower and time indicate that it may be impossible to perform the necessary study in time to have it available for its next general rate increase filing. Therefore, Penelec suggests that the requirement be to produce the study within such time as may be reasonable and practical.

We are unable to perceive the difficulty, which Penelec's exception implies, in developing historic data regarding uncollectible expense write-offs by customer class. We shall deny Penelec's exception; with the explanation that we expect the Company to proceed with a study with dispatch, in order to produce some work product more satisfactory than judgment, and in the event the Company is unsuccessful, we shall then entertain its explanations, in determining whether the Company has made a serious and concerted effort to comply with our order.

## 3. Allocation of TMI-1 Investment

Penelec's position is that TMI-1 was constructed to meet system requirements for both demand and energy. Such being the case, Penelec classifies a portion of the capital costs as energy related, and, based upon a comparative analysis of the capital costs of coal and nuclear plants, concluded that 45% of the capital costs of TMI-1 were a fair quantification of the costs incurred, over and above the costs of a comparable coal fired plant.

The Bethlehem witness Eisdorfer took the position, which the ALJ characterized as untenable, that TMI-1 was constructed almost exclusively for capacity reasons, while also conceding that energy costs are a significant consideration in any construction decision. The position of Bethlehem is that TMI-1 should be classified as demand related, in its entirety.<sup>58/</sup>

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<sup>58/</sup> Mr. Drazen, testifying on behalf of the Industrials, took a similar position. Mr. Drazen's arguments do not differ significantly from those of Mr. Eisdorfer.

The ALJ recommended that the position of Bethlehem and be rejected. Bethlehem excepted arguing that the Company's cost allocation is a departure from its past practice and past Commission decisions, in certain instances.

The classification of a portion of the capital costs of a nuclear generating plant as energy related is not new to us and the Commission has approved similar classifications in the past. As has been said on prior occasions, large energy users, as a class, are the prime beneficiaries of the lower energy costs associated with nuclear generation and, therefore, it is only fitting and proper that they bear a major responsibility for the capital costs.

In the Commission's Order in Pa. P.U.C. v. Philadelphia Electric Company, R-79060865 (May 9, 1980), in discussing a prior order at R.I.D. 295, the Commission said:

We also concluded that the cost of new generating plant, allocated on a coincident peak responsibility basis, does not afford adequate recognition of the benefits that accrue to high consumption customers as a result of decreasing operating expenses associated with adding new generating plant. In the instant proceeding, the same rationale is still appropriate, because the Company will be able to utilize the newer plant (which has been included in rate base in this case) during the period where the rates will be in effect.

Id. at mimeo p. 49. While the quotation above is not precisely in point, in that a portion of the plant was not classified therein as energy related, the rationale is analogous; that is, the energy cost reduction result of new plant should be recognized. Here, such result is proposed to be recognized by the Company, through the vehicle of the classification procedure in the cost allocation study, which attributes additional "excess" capital investment to the objective of producing cheaper energy.

In this regard we find most pertinent the statement in the Exceptions of Bethlehem that "in choosing what types of production plant to add to its system, a utility attempts to minimize its total cost...." (Emphasis added) (Bethlehem's Exceptions, p. 4). This is precisely the point. To the extent that additional capital investment is incurred to reduce energy production costs, that investment should properly be classified as energy, because it reduces energy production costs, below what they would otherwise be.

Bethlehem cites our recent Opinion and Order in Pa. P.U.C. v. Pennsylvania Power and Light Co., R-822169 (August 22, 1983), as supportive precedent, stating that we there rejected the Average and Excess demand allocation method, which allocates some demand costs in an energy basis. We do not find that Opinion and Order in point and authority for the proposition that no portion of power production plant is ever properly classified as energy related. Additionally, we did not reject the Average and Excess Demand method proposed by the Staff, in favor of the Company's proposed Coincident Peak method. We merely found the overall results of the Company's cost allocation study, generally acceptable for the purpose for which it is used, which is as a general guide regarding customer class cost responsibility.

We deny the exception of Bethlehem and reject its proposed modification of the Company's cost allocation study.

#### 4. Allocation of EPRI Dues and Production Maintenance Expenses

Bethlehem's witness Eisdorfer challenges the Company's classification of EPRI dues and a portion of production maintenance expenses as energy related. Mr. Eisdorfer suggests that approximately \$9.5 million of a total of \$39.0 million, related to maintenance of electric plant and production plant structures, is improperly classified as energy related. Regarding EPRI dues, his position is that EPRI funds a wide range of research projects which are not all related to energy, thus he recommends that these costs be allocated to classes on the basis of overall rate base allocations.

The Company's position is that the production maintenance expenses are in fact, energy related. As to the EPRI dues, they explain that a major position of EPRI research and development projects in Pennsylvania are energy related, and for this reason, the expenses are classified as energy related.

The ALJ found no merit in Mr. Eisdorfer's position and recommended against adoption. Bethlehem has not excepted.

We are of the opinion that, even through the NARUC Cost Allocation Manual suggests that all production maintenance (structures) expense be classified as demand related, the mere appearance of certain expenses in a given account may not tell all about the exact nature of the expenses. In any event, the amount is minor and would not have any significant effect upon the Company's overall cost allocation study results, which in turn is not rigidly followed.

As to the EPRI dues expense classification, we find that this is one of those subjects as to which subjective judgement on the part of an individual analyst plays a large role. Again, we are of the opinion that the adoption of Mr. Eisdorfer's recommendation would have no effect upon our conclusion regarding revenue allocation. Accordingly, we reject the recommendation.

#### 5. Rate LP Voltage Discount

Penelec does not have a separate rate schedule for deliveries at 115 kv and above, but grants a discount for such service, currently \$.25 per kw and proposed to be increased to \$.30 per kw. Bethlehem witness Eisdorfer stated that the amount of the discount inadequately recognizes the costs avoided by the absence of the use of subtransmission and distribution facilities by this type of service, and stated that proper recognition of subtransmission and distribution costs avoidance alone would warrant a discount of \$.67. Further, that this amount is actually inadequate in that it does not reflect the costs avoided by the non-use of a portion of the bulk transmission system.

It appears that the ALJ was unsatisfied with the analysis presented by Mr. Eisdorfer, and recommended that the proposal be rejected.

First, of course, the level of operating revenues authorized in this proceeding would have some impact upon the validity of the figures Mr. Eisdorfer developed. Secondly, assuming that Mr. Eisdorfer's underlying cost figures are correct, his proposal is to reflect all cost avoidance applicable to the 115 kv subclass of customers in the demand charge. If, in reality, some of these costs are included in energy charges, the result would be to underpriced demand and overpriced energy. Looking at the record as a whole, we are not entirely satisfied that Mr. Eisdorfer's point is well taken, that is that 115 kv customers as a subclass are being overcharged. Secondly, assuming that we were satisfied, it is not clear that the remedy which he suggests, of providing for a demand charge discount approximately 2 1/2 times the current discount, is the proper cure for the ailment. Perhaps the 115 kv customers will choose to address this subject again in the next proceeding and address the additional subject of the levels of demand charges and energy charges, vis a vis demand and energy costs. The exception of Bethlehem is denied.

#### 6. Bulk Power Supply Cost Allocation

Penelec allocated production and transmission demand related costs on the non-coincident peak method, considering two summer and two winter months. Bethlehem and the Industrials suggest that, more appropriately, these costs should be allocated on the coincident peak method, considering only two winter months. This proposal would result in a change from a methodology of long standing, both as to the utilization of only two winter months, and the change from the non-coincident to the coincident peak method. The position of both Bethlehem and the Industrials is that the significance of Penelec's summer peak has been diminishing

and that of the winter peaks, increasing, in recent years. This comment leaves the subject of the proposed change from the non-coincident peak to the coincident peak method, unaddressed.

We find the answer to this matter in the Main Brief of the Industrials, where it is stated that:

Mr. Drazen provided a cost-of-service study incorporating his computational corrects, and allocating production and transmission costs on an average of two winter monthly coincident peaks (December and January) and allocating TMI-1 as 100% demand. \*\*\* Mr. Drazen found that the rates of return of the various classes change somewhat, but did not depart substantially from the results shown by Mr. Carter's [Company witness] study and methodology. (Emphasis added).

Industrial Brief, pp. 14-15. First, we are unpersuaded that there is any major infirmity in this position of the Company's cost of service study or that the proposal of the Industrials would improve it. Second, it seems that the result of the proposed modification would not materially alter the results.

The ALJ recommended disapproval of the proposed. Neither Bethlehem nor the Industrials have excepted. We reject the proposals.

#### B. Revenue Allocation

In their exceptions Bethlehem notes the fact that the ALJ did not specifically address the subject of revenue increase allocation, except perhaps implicitly. The exception states that based upon either the Company's cost allocation study or that presented by Mr. Eisdorfer, rates GP and TP are currently set below cost. Further, they state that the revenue allocation as proposed by the Company would increase rates of return from these classes above the system average, based upon either cost study. They characterize this as replacing an undercharge with an overcharge.

Bethlehem contends that Mr. Eisdorfer's revised revenue distribution proposal (Schedule 5 of Exhibit KE-1), would move all of the presently below average classes to the system average, and thereby move all classes closer to costs. Therefore, they argue that their proposal, appropriately scaled back to reflect our allowance herein, is more appropriate than the Company's proposal.

The positions taken by Bethlehem and Appleton obviously attribute to cost allocation studies, a degree of importance which we do not attach to them. In our PP&L Opinion and Order, which Bethlehem has cited above, we included the following quotations:



A cost of service study is one of the most subjective elements in any rate case. The methods used for classifying items of plant and expense between demand, customer and energy components are far from being an exact science. Cost of service studies are more accurately characterized as engineering art. (Emphasis deleted.)

This Commission has historically recognized the cost of service study for what it is: a useful tool for testing the reasonableness of the proposed allocation of the revenue requirement. Rarely, if ever, is revenue requirement allocated strictly on the basis of cost of service results. In most instances, and this case is no exception, the revenue allocation is based primarily on other factors such as economic impact and rate continuity with some modification due to cost of service considerations.

Pennsylvania Public Utility Commission, et al. v. Duquesne Light Company, R-821945, et al., January 28, 1983, p. 73.

Moreover, as stated by the Commonwealth Court in Philadelphia Suburban Transportation Co. v. Pa. P.U.C., 3 Pa. Cmwlth. Ct. 184, 196, 281 A.2d 179, 186 (1971):

There is no requirement that rates for different classes of service must be either uniform or equal or that they must be equally profitable. Differences in rates between classes of customers based on such criteria as the quantity of electricity used, the nature of the use, the time of the use, the pattern of the use, or based on differences of conditions of service, or cost of service are not only permissible but often are desirable and even necessary to achieve reasonable efficiency and economy of operation. Rate structure, which is an essential, integral component of rate-making, is not merely a mathematical exercise applying theoretical principles. Rate structure must be based on the hard economic facts of life and a complete and thorough knowledge and understanding of all the facts and circumstances which affect rates and services; and the rates must be designed to furnish the most efficient and satisfactory service at the lowest reasonable price for the greatest number of customers, i.e., the public generally.

Id., mimeo pp. 91-92. We continue to view a cost of service study as merely a useful tool for testing the reasonableness of the proposed

allocation of the revenue requirement, not as a template to be blindly and religiously conformed to.

The ALJ recommended rejection of Bethlehem's and Appleton's positions. Both have excepted.

Appleton also takes issue with the Company's proposed revenue responsibility allocation. Basically, Appleton argues that the cost of service study should be the sole and exclusive standard for revenue allocation.

Based upon our review of the Company's proposed revenue requirement allocation, in conjunction with the Company's cost of service study, we find it reasonable and acceptable, as appropriately scaled back to conform to our revenue requirement finding herein, and we shall so order. The exceptions of Bethlehem and Appleton are, accordingly, denied.

C. Specific Rate Structure Changes

1. Residential Customer Charge

Penelec proposes to increase the residential customer charge from \$6.00 to \$7.00 per month. This proposal is opposed by both the Staff and the OCA. The Staff position is that the current charge is adequate to recover the relevant costs, which are the capital costs of meters and service drops, associated operation and maintenance expenses, and meter reading and billing. The OCA's position is that the current charge exceeds customer costs, as it quantifies them. The position of the Penelec witness is that the increased charge of \$7.00 would only recover 54% of customer costs.

Mr. Rosenthal, the Staff witness, amplified upon his position and stated that while there are other customer related costs, such as a portion of transformers and distribution lines, beyond carrying costs on meters and drops, operation and maintenance expense related thereto, and meter reading and billing, he does not view it as appropriate to include such costs in a customer charge, due to the fact that individual customer service requirements may vary significantly from the average, readily resulting in intraclass subsidization.

As noted by Mr. Rosenthal, the Commission has adopted his "basic" customer charge approach in three recent cases.<sup>59/</sup>

The ALJ recommended rejection of the Company's proposal. The Company has excepted. We find nothing new offered in support of the exception. We adopt the recommendation of the ALJ, in accordance with the cited prior decision, and, accordingly, deny the exception.

59/ Pa. P.U.C. v. Pennsylvania Power Co., R-811510 (January 22, 1982);  
Pa. P.U.C. v. Philadelphia Electric Co., R-811626 (May 21, 1982);  
and, Pa. P.U.C. v. Duquesne Light Co., R-821945 (April 18, 1983).

## 2: RT Rate Schedule

The OCA took issue with the Company's proposed increase in the on-peak and off-peak charges for rate RT. The OCA's position is that the proposed off-peak increase is more than <sup>60/</sup>36%, which is excessive when contrasted with other proposed increases.

The Company's position is that both on-peak and off-peak charges are proposed to be increased by approximately one cent (the differential is actually increased from 5.5 cents to 5.7 cents per kilowatt hour).

The ALJ agreed with the Company that the percentage comparisons of the OCA witness were invalid (misleadingly), and recommends rejection of the OCA proposal. The OCA has not excepted. We find the Company proposal to be reasonable and it is adopted.

## 3. Discontinuance of Service

The complaint of Edward J. and Martha G. Gouly is concerned with Penelec's charges applicable to temporary disconnection of service, specifically the reconnection charge and the \$6.00 per month minimum (customer) charge.

We can understand the Complainants' viewpoint. In their eyes they may view this as paying for something which they did not use. On the other hand, most customers appreciate the fact that a utility must recover the costs of the meter and service drop, and the costs of meter reading and billing, whether the dwelling is occupied or not, or regardless of the amount of electricity consumed. This is not unlike the charge for a rental vehicle, at so much per day and so much per mile. There are capital costs associated with the possession of the vehicle whether it is driven or not. These types of costs are the "readiness to serve" costs to which the ALJ made reference.

The subject of minimum charges and their appropriate level have been litigated for years, in many utility rate proceedings. We have concluded that they are necessary in order that each customer bears the costs which they impose upon the utility, whether they are present or absent from their home. Accordingly, we deny the complaint.

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60/ The OCA witness also proposed that the on peak and customer charge be increased, the excess demand charge and solar credit charges be modified and the off-peak charges be reduced. All of these proposed changes depend upon the witness' cost allocation study.

## VII. CONCLUSION

We have concluded herein that Pennsylvania Electric Company is entitled to an opportunity to earn income available for return of \$105,132,000 based upon total company operations. This constitutes an increase in jurisdictional operating revenues of \$44,758,000 or approximately 52.5% of the \$85.2 million increase contained in its initial filing. Based upon a total company operating revenue requirement of \$596,616,000 we find that Pennsylvania Electric Company is entitled to establish rates which will produce \$44,758,000 annually in additional jurisdictional operating revenues, in such a manner as is more fully described in the Ordering Paragraphs; THEREFORE,

### IT IS ORDERED:

1. That the Pennsylvania Electric Company shall not place into effect the rates contained in Supplement 20 to its Tariff Electric-Pa. P.U.C. No. 75, the same having been found to be unjust, unreasonable, and, therefore, unlawful.

2. That the Pennsylvania Electric Company is hereby authorized to file tariffs or tariff supplements containing rates consistent with our findings herein, which are designed to produce \$44,758,000 annually in additional jurisdictional operating revenues.

3. That, in support of such tariffs or tariff supplements, there shall accompany such filing a proof of revenues, for each rate schedule, reflecting the adjusted and normalized level of sales, at year end of the test year, as adopted in this proceeding.

4. That the tariffs or tariff supplements may be filed on less than statutory notice, and, pursuant to the provisions of 52 Pa. Code §3.321(b), the tariffs or tariff supplements may be filed to become effective for service rendered on and after the date of entry of this Opinion and Order.

5. That the Pennsylvania Electric Company shall allocate the increase in operating revenues granted herein to each customer class, based upon the percentage of the overall revenue increase which the Respondent's proposed revenue increase allocation produced.

6. That the State Tax Surcharge shall be recomputed in accordance with the State Tax Surcharge Order of March 10, 1979, as revised.

7. That the Pennsylvania Electric Company shall, within ninety (90) days of the date of entry of this Opinion and Order, file its proposed depreciation reporting and tracking procedure with the Commission Secretary, as agreed to by the Respondent.

8. That the Pennsylvania Electric Company shall conduct a study to develop historic data regarding uncollectable expense by customer class (rate schedule). That this study shall be pursued with

diligence and dispatch in order that the results of the study shall be available for use in the Respondent's next rate increase proceeding.

9. That except to the extent herein modified, the Recommended Decision of the Administrative Law Judge, including the findings of fact and conclusions of law, contained therein, is adopted as the decision of the Commission.

10. That except to the extent not specifically granted herein, the exceptions of all parties, to the Recommended Decision of the Administrative Law Judge, are denied.

11. That the Pennsylvania Electric Company shall comply with all other directives in the body of this Opinion and Order, which are not the subject to an individual directive in the preceding Ordering Paragraphs, as fully as if they were the subject of a specific Ordering Paragraph.

12. That the Complaints filed by the various parties to this proceeding are granted or denied to the extent consistent with this Opinion and Order.

13. That upon Commission acceptance and approval of the tariffs or tariff supplements, authorized to be filed herein, the Commission investigation shall be terminated and the filed marked closed.

BY THE COMMISSION,

  
Jerry Rich  
Secretary

(SEAL)

ORDER ADOPTED: ~~October 14, 1983~~

ORDER ENTERED: ~~October 19, 1983~~

TABLE I  
PENNSYLVANIA ELECTRIC COMPANY  
INCOME SUMMARY  
TOTAL COMPANY WITH TMI-1  
(\$000)

	ALJ Allowable Rates <sup>1/</sup> \$	Commission Adjustments \$	ALJ Adjusted Rates \$	Recommended Increase \$	Total Allowable Revenues \$
Operating Revenues	615,052		615,052	(577)	614,475
Deductions:					
O&M Expenses	352,224	142	352,366	(281)	352,366
Depreciation	56,587		56,587	(12)	56,587
Taxes:					
Income	69,275	119	69,394	(281)	69,113
Other	20,447		20,447	(12)	20,435
Total Deductions	498,533	261	498,794	(293)	498,501
Net Income Available for Return	<u>116,519</u>	<u>(261)</u>	<u>116,258</u>	<u>(284)</u>	<u>115,974</u>
Rate Base					<u>1,063,003</u>
Recommended Rate of Return					<u>10.91%</u>

<sup>1/</sup> As Corrected

TABLE II  
 PENNSYLVANIA ELECTRIC COMPANY  
 SUMMARY OF ADJUSTMENTS TO ALJ DECISION  
 TOTAL COMPANY WITH TMI-1  
 (\$000)

Recommended Adjustment	Rate Base Effect \$	Revenue Effect \$	Expense Effect \$	Depreciation Effect \$	Effect Upon Taxes-Other \$	State Tax Effect \$	Federal Tax Effect \$
1. Nuclear Spare Fuel Assemblies	(5,814)						
2. M&S Other than Fuel	(5,987)						
3. Referred Credit for Reserve Capacity	2,868						
4. Decommissioning of Saxton			10			(1)	(4)
5. Decommissioning of TMI-1			132			(9)	(57)
6. Tax Effect of Interest Change						27	163
<b>Total Adjustments</b>	<u>(8,933)</u>		<u>142</u>			<u>17</u>	<u>102</u>
ALJ Rate Base	<u>1,071,936</u>						
Recommended Rate Base	<u><u>1,063,003</u></u>						

TABLE I

PENNSYLVANIA ELECTRIC COMPANY  
 INCOME SUMMARY  
 TOTAL COMPANY W/O TMI-1  
 (\$000)

	ALJ Allowable Rates \$	Commission Adjustments \$	ALJ Adjusted Rates \$	Recommended Increase \$	Total Allowable Revenues \$
Operating Revenues	598,239		598,239	(1,623)	596,616
Deductions:					
O&M Expenses	350,005	(1,925)	348,080		348,080
Depreciation	56,747		56,747		56,747
Taxes:					
Income	66,359	1,011	67,370	(791)	66,579
Other	20,110		20,110	(32)	20,078
Total Deductions	493,221	(913)	492,307	(823)	491,484
Net Income Available for Return	105,018	913	105,932	(800)	105,132
Rate Base					963,628
Recommended Rate of Return					10.91%

1/ As Adjusted



TABLE II  
 PENNSYLVANIA ELECTRIC COMPANY  
 SUMMARY OF ADJUSTMENTS TO A.J. DECISION  
 TOTAL COMPANY W/O TMI-1  
 (\$000)

Recommended Adjustment	Rate Base Effect \$	Revenue Effect \$	Expense Effect \$	Depreciation Effect \$	Effect Upon Taxes- Other \$	State Tax Effect \$	Federal Tax Effect \$
1. M&S Other than Fuel	(5,364)					135	828
2. Deferred Credit for Reserve Capacity	2,868		(1,935)				
3. Decommissioning of Saxton			10			(1)	(4)
4. Tax Effect of Interest Change						7	46
<b>Total Adjustments</b>	<u>(2,496)</u>		<u>(1,925)</u>			<u>141</u>	<u>870</u>
ALJ Rate Base	<u>966,124</u>						
<b>Recommended Rate Base</b>	<u><u>963,628</u></u>						

Public Meeting October 14, 1983

OPINION OF COMMISSIONER MICHAEL JOHNSON

CONCURRING IN PART AND DISSENTING IN PART

R-822249 et al., (MET ED)

R-822250 et al. (PENELEC)

Some potentially important questions have not been addressed by the Commission by polling only the exceptions to the recommended decisions for Met Ed and Penelec. At R-822249 (Met Ed pages 4-5) and R-822250 (Penelec pages 5-6) the Administrative Law Judge indicates a reaffirmation of the operating standards as the appropriate basis for inclusion of TMI-1 operating and capital costs in customers rates. The standards referenced were set forth in the "Joint Petition for Settlement of Rate Proceedings" of the R-811601 (Met Ed) and R-811602 (Penelec) rate cases at numbered paragraph 4 of the "Terms and Conditions" of the settlements. I am unsure of the significance of this reaffirmation. It might mean that those standards are to be applied to a future request for the inclusion of TMI-1 in rates. It might be interpreted to suggest that numbered paragraph 1 of the settlement is still binding on the parties to the last case. Is the resolution of the TMI-1 rate making issues at the level of operations of this case intended to be an update of a portion of the earlier settlements? Possibly the resolution of the TMI-1 issues will be a guide to the interested parties as to what level of rates would be appropriate for expedited consideration by the Commission. However, as I indicated during the polling of these cases, TMI-1 is not used and useful and therefore the resolution of the TMI-1 issues is moot.

During the polling I disagreed with the majority with respect to plant held for future use. I believe that section 1315 of the Public Utility Code is applicable to this claim and it must be rejected. I reaffirm that position.

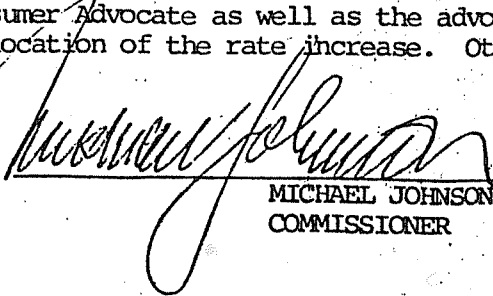
I disagree with the failure to update the valuation of the coal and oil in inventory and support the position of the Consumer Advocate.

The allowance for return on common equity is excessive with respect to the minimum necessary to attract and maintain capital.

I do not support the change in decommissioning of nuclear facilities expense treatment developed by the Commissioners for these cases. Although, I do support the proposition of providing for the eventual removal of radioactive equipment through the rates of the users.

I support the allocation of distribution costs for cost of service purposes as proposed by the Consumer Advocate as well as the advocates position with respect to the allocation of the rate increase. Otherwise, I concur with the majority.

DATE: 10/14/83

  
MICHAEL JOHNSON  
COMMISSIONER