

DECISION OF 5/31/78 WHICH EXCLUDED  
TMI-2 FROM RATE BASE

PENNSYLVANIA  
PUBLIC UTILITY COMMISSION  
Harrisburg, PA 17120

F-4

ORDER ADOPTED:

Public Meeting held May 23 and May 31, 1978

Commissioners Present:

Louis J. Carter, Chairman  
Robert K. Bloom, Dissenting  
Helen B. O'Bannon, Concurring  
Michael Johnson  
W. Wilson Goode

ORDER  
ENTERED : 9/18/78

commercial op. vs. used & useful  
(p. 5)

TMI-2 devalued (p. 6)

- |            |  |
|------------|--|
| R.I.D. 434 | - Pennsylvania Public Utility Commission   |
| C. 22492   | - Mark Widoff, Consumer Advocate   |
| C. 22503   | - Stanley A. Kobzak  |
| C. 22523   | - Dominic Fiorino  |
| C. 22528   | - Northampton Convalescent Center  |
| C. 22533   | - John R. Kelsey, III and Thomas S. Long   |
| C. 22535   | - John P. Daniels  |
| C. 22540   | - Harry M. Susi  |
| C. 22548   | - Bradywine Recycler's, Inc.   |
| C. 22550   | - Board of Township Supervisors of the<br>Township of Monroe, Cumberland County    |
| C. 22556   | - Carroll Jack Koster  |
| C. 22561   | - St. Regis Paper Company  |
| C. 22594   | - South Middletown School District   |
| C. 22596   | - Margaret Freed   |
| C. 22605   | - Muhlenburg Township Commissioners  |
| CR 0434001 | - William S. Grubb   |
| CR 0434002 | - John F. Romann   |
| CR 0434003 | - The Committee of Dissatisfied Utility<br>Consumers by G. Allen Flammer, Chairman |
| CR 0434004 | - Boyertown Happy Agers  |
| CR 0434005 | - Richard R. Biancone, Sr.   |
| CR 0434006 | - Thomas R. Caltagirone  |
| CR 0434007 | - Frederick O. Graves  |
| CR 0434008 | - South Middletown Township  |
| CR 0434009 | - Citizens of South Middleton Townships for<br>Action and John Marchi              |
| CR 0434010 | - Adams County Office for Aging, Inc.  |

v.

Metropolitan Edison Company

8001170724

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Metropolitan Edison Company

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O R D E R

BY THE COMMISSION:

INTRODUCTION

On July 1, 1977, Metropolitan Edison Company (Met-Ed) filed Tariff Electric-Pa. P.U.C. No. 42 proposing increases in its base rates and changes in its tariffs including its present form of energy clause. Respondent calculated these tariff revisions would produce approximately \$44,200,000 in additional annual operating revenues based upon the level of operations at March 31, 1977. Of the total amount requested about \$35,900,000 or over 80% will be associated with respondent's 25% share of the capital and operating costs of Three Mile Island No. 2 (TMI-2), an 880 MW nuclear unit scheduled to go into service during the first half of 1978. Tariff Electric-Pa. P.U.C. No. 42 was to become effective on August 30, 1977. ??

On July 26, 1977 the Commission suspended operation of the proposed tariff to February 28, 1978 and an investigation was instituted at Rate Investigation Docket No. 434. Pre-hearing conferences were held in Harrisburg on September 1 and 29, 1977. Also, during the month of September, non-evidentiary evening hearings were held in Reading, in Easton, in Lebanon, and in York for the purpose of gathering public comment. Twenty-nine days of evidentiary hearings were held over a period from October 3, 1977 until the close of the record on January 6, 1978. At public meeting held January 31, 1978 the proposed tariff was further suspended to May 30, 1978.

On March 9, 1978, the proposed Order of Administrative Law Judges Banzhoff and Cohen was issued for comments and exceptions. The proposed order recommended respondent be granted an increase in annual operating revenues of \$40,500,000 for total company operations. Respondent, Consumer Advocate, and Commission Staff have made responses. Also, an oral argument on the issue of TMI-2 was held on May 10, 1978.

At public meetings held May 23 and 31, 1978 we considered the Administrative Law Judges' decision and the exceptions filed by the parties. We have concluded on the basis of the record before us that the company has supported the need for additional annual revenue of \$2,771,900. Of this amount, \$2,561,800 should be assigned to Pennsylvania retail customers. Our decision excludes any allowance for revenues associated with TMI-2 due to reasons discussed later in our findings. Since the statutory suspension period has expired, we will direct that the company may file with us a detailed plan of recoupment. We now detail our reasons for those decisions.

MEASURES OF VALUE

Respondent submitted an original cost measure of value, and trended original cost measures of value at the spot, one-year, three-year and five-year average price levels as of March 31, 1977. The company's estimates are set forth below.

TABLE I  
Measures of Value  
(000 Omitted)

Original Cost	Spot Price Level at 3/31/77	Trended Original Cost at		
		One-Year Average	Three-Year Average	Five-Year Average
\$886,618	\$1,284,991	\$1,284,221	\$1,270,944	\$1,209,946

Both the Staff and Consumer Advocate believe these estimates overstate the value of the company's plant, and they propose a number of downward adjustments. Consumer Advocate and staff recommended adjustments to electric plant in service, depreciation reserve and cash working capital. Consumer Advocate also recommended adjustments should be made for nuclear spare assemblies, customer deposits, accrued deferred income taxes, operating reserves and net gain on reacquired debt. We will discuss each of these issues in turn.

Three Mile Island No. 2

Electric plant in service claimed by respondent includes \$165,931,000 at undepreciated original cost for Three Mile Island No. 2 (TMI-2) generating unit. TMI-2 is an 880 MW total capacity nuclear unit with the claim of respondent representing a 25% ownership share. The expected in-service date has been often postponed and is now estimated for sometime during the fourth quarter of this year.

Roughly eighty percent of respondent's proposed rate increase is required to cover the capital and operating costs of this unit. Although the in-service date is expected to occur well over 18 months after the end of the test year (March 31, 1977), the company argues for timely recognition of TMI-2 in rate base. Recognizing the anomaly of this situation, the company stated that it would not seek to collect that part of any rate increase for TMI-2 until the unit is actually placed in service. Respondent feels timely recognition is necessary because of the fundamental nature of nuclear units; namely, they have a relatively low fuel cost but require high capital costs. Consequently, the capital costs of TMI-2 must wait to be built into base rates, while the benefits of the low fuel costs are immediately flowed through to the ratepayers through the operation of Metropolitan Edison's energy adjustment clause.

Staff is opposed to all of the TMI-2 claims made by respondent. Its opposition is based on three arguments: (1) the revenue and expense effects cannot be accurately determined at this time; (2) the plant on which respondent is asking for a return is not now used and useful in public service; and (3), respondent has not made the necessary revenue adjustments to match the level of customer sales which will exist at the time TMI-2 is placed in service. In the event TMI-2 is included in the Administrative Law Judges' allowances, Staff recommends a 40 year life span for TMI-2 commencing with the in-service date of 1978 instead of the 31 year life span claimed by respondent. The effect of the revised life span would be to reduce the claimed annual depreciation expense from \$6,233,000 to \$5,273,000.

The Consumer Advocate raises a number of legal issues in its opposition to respondent's TMI-2 claims. Public Utility Law places a responsibility on the utility to select a test year representative of the period in which the proposed rates will be effective. A test year to be representative must properly match revenues, expenses and investment. The Consumer Advocate is of the opinion the company has failed to meet this responsibility with regard to TMI-2.

It is the argument of the Consumer Advocate that inclusion of TMI-2 in rate base by the Commission without verification the plant is in commercial operation and without determination of the company's investment in the plant would be contrary to law and sound regulatory practice.

An additional legal argument advanced by the Consumer Advocate is that for the Commission to include TMI-2 in rate base and allow the claim for one year's TMI-2 operating expenses without taking into account post-test year revenue growth would be improper. Thus, in the opinion of the Consumer Advocate, the Commission may not allow any out-of-period expenses or rate base claims without considering the matching out-of-period revenue growth.

The Consumer Advocate proposed that within one month after the company declares TMI-2 to be in commercial operation, the Commission should verify the plant's operation and adjust the base rates to provide it a return on investment. It is part of Consumer Advocate's proposal that respondent can begin collecting the higher rates within roughly two months after the date TMI-2 is placed in commercial operation.

Judges Banzhoff and Cohen found there was no showing that TMI-2 will not be placed in service as anticipated. Also, they said respondent does not contemplate collecting the proposed rates until TMI-2 is actually in service, or in other words, if TMI-2 is not in commercial operation by May 31, 1978 (the date Met-Ed anticipated, Met-Ed "will correspondently voluntarily extend the suspension of the increase until the date the unit actually begins commercial operation." Thus, the Administrative Law Judges concurred with the inclusion of

\$165,931,000 of TMI-2 plant costs by respondent in the claimed measures of value. Consumer Advocate and Staff except.

*Commercial vs. used & useful*

The Consumer Advocate takes the position the Judges erred in the recognition of TMI-2 for three reasons. The first is recognition of TMI-2 at the time when respondent declares it commercial rather than at a time when the Commission determines it "used and useful." Secondly, they allowed a level of investment in electric plant in service which respondent estimated rather than an actual level when TMI-2 becomes "used and useful". And thirdly, they did not recognize post-test-year revenues growth which will be available to offset the additional expenses needed to operate and maintain TMI-2. The Consumer Advocate would accept recognition of TMI-2 in this proceeding if the above three objections were satisfied.

It was proposed by Consumer Advocate that the Commission postpone the effective date of the rate increase until one month after respondent declares TMI-2 to be in commercial operation. Within that month, the Commission could verify if the unit's output is sufficient to support "used and useful" status and could adjust the amount of rate increase to reflect the actual, rather than the estimated level of investment. Because of the lag in the energy clause, fuel savings passed through the energy clause would not occur until two months after the unit is declared commercial. Consequently, the company will not experience any erosion of earnings until that time.

Another alternative advanced by Consumer Advocate would be for the Commission to reach a tentative decision in this proceeding and put the rates into effect as temporary rates under Section 310 of the Public Utility Law. The effective date of these rates would be the date the company declares TMI-2 to be in commercial service. The Commission could then evaluate the level and reliability of the output from TMI-2 and measure the actual investment in electric plant in service. If the review verifies that TMI-2 is "used and useful" and represents \$165,931,000 in investment, the temporary rates could be made final. If another conclusion was reached, a reduced level of rates could be made final and a refund ordered.

Staff in its brief on exceptions urges disallowance of TMI-2 in measures of value and fair value. Data from a test year ended March 31, 1977 are rendered distorted if TMI-2 is included as an adjustment to that test year.

We agree generally with the Staff and Consumer Advocate. We do not believe an authorization should be granted to increase rates at some indefinite future time. Furthermore, there has to be a finality to this proceeding and any further extension of it to resolve additional problems would be self-defeating. See I.C.C. v. Jersey City, 322 U.S. 503, 514 - 19 (1944). Instead, we believe the better procedure to follow here would be to have the company

make a separate filing to reflect its increased revenue requirement resulting from the commercial operation of TMI-2. In this way, the objections of Staff and the Consumer Advocate, which we believe have considerable merit, will be met while, due to what we anticipate will be the expedited nature of any new proceeding in light of the recentness of this proceeding, any capital attrition which the company may incur will be minor. We disallow the claim for TMI-2 of \$169,563,000 from the original cost measure of value.

#### TMI-1 Ring Girder

During the construction of TMI-1, it was necessary to remove part of a ring girder atop the building housing the nuclear reactor and to make a fresh concrete pour because of void spaces in the initial pour. The associated costs of the initial pour were estimated to be \$6.3 million. The respondent's electric plant in service claim has not been adjusted to exclude any costs associated with the faulty pour. The company argues that litigation has been initiated against the contractors and engineers to recover these costs and the question of a judgement and an adjustment to rate base are at this stage very speculative.

Consumer Advocate and Commission Staff recommended the Administrative Law Judges reduce respondent's claim by \$3,150,000 to reflect the disallowance of the costs associated with the faulty ring girder pour. They cite Commission action in the last proceeding at R.I.D. 170-171 where disallowance was made for the cost of this faulty pour. There the Commission concluded, "Regardless of subsequent litigation which may determine responsibility for the faulty concrete pour at TMI, we are of the opinion that respondent's ratepayers should not be made to bear this burden," 50 Pa. P.U.C. 77, 102 (1976). Judges Banzhoff and Cohen accepted this position and we agree. The company has not excepted to the Administrative Law Judges' recommendation.

#### Nuclear Fuel-Spare Assemblies

Respondent claimed \$2,854,000 for nuclear fuel-spare assemblies in its measures of value in accordance with a corporate policy decision to provide an on-site nuclear fuel inventory in event of an emergency and fuel management flexibility. These assemblies are valued at their estimated 1979 cost.

Consumer Advocate objects to this claim on the grounds that it is not based on experienced test year costs for nuclear fuel. The Consumer Advocate's witness calculated a value for spare assemblies at \$2,077,000 or \$777,000 less than respondent claimed (C.A. Statement No. 3, pp. 33-34). The Administrative Law Judges agreed that the claim was not fully supported and adjusted measures of value to eliminate \$777,000.

An exception has been filed by the Company. Respondent points out its claim for nuclear fuel spare assemblies reflected the average cost and quantity of assemblies during the initial equilibrium cycle of TMI-1 and 2. This claim, it feels, is consistent with its treatment of its investment in nuclear reactor fuel and the methodology utilized by the Commission in its last rate case in determining equilibrium conditions upon which a nuclear fuel claim should be based.

We agree with the recommended decision of the Administrative Law Judges. Costs estimates projected almost two full years into the future beyond the end of the test year are too speculative to be included in the setting of base rates under the test year concept. We adjust downward by \$777,000 the claim of respondent for nuclear fuel spare assemblies.

#### Cash Working Capital

The company claimed \$10,405,000 for cash working capital comprised of the following components:

TABLE II

Components of Cash Working  
Capital Claim

1. Operation and Maintenance Expenses	\$ 3,357,000
2. Average Prepayments	663,000
3. Accrued Taxes	5,806,000
4. Compensating Bank Balances	<u>579,000</u>
Total	\$10,405,000

A lead-lag study was used by respondent to support its claim for operation and maintenance expenses. The total claim of \$10,405,000 includes a cash working capital amount of \$505,000 for TMI-2.

Staff argued that a major flaw exists in respondent's lead-lag study. This flaw, according to Staff, was built into the study when it was assumed that all customers paid their bills on the last day of the net billing period. Staff made a recalculation using the midpoint of the net billing period which resulted in a recommended disallowance of \$3,448,000 for operation and maintenance expenses. Also, staff urged disallowance of \$226,000 of average prepayments related to Old Home Manor, Inc., a coal supplier with which the company is no longer doing business and \$505,000 of cash working requirements for TMI-2. The total recommended disallowance is \$4,179,000.



Witness of Consumer Advocate recommended use of the balance sheet approach to determine respondent's cash working capital needs. Using this analytical method Consumer Advocate takes the position that the non-investor supplied sources of working capital exceed the need for cash working capital and respondent's total claim is not supported. In the alternative Consumer Advocate would support many of the conclusions found in the position of Staff.

The recommended decision of the Administrative Law Judges essentially adopts the Staff position. The cash working requirements for TMI-2 are allowed in accordance with the Judges acceptance of TMI-2 in measures of value and the total cash working capital recommended was \$6,731,000.

Respondent takes exception to the Judges' report. The company believes the record does not support the assumption that payments from customers are received on average before the end of the prescribed payment period.

We generally agree with the position of Staff. Staff reduced cash working capital by \$3,448,000 to reflect the assumption customers paid their bills at the midpoint of the net billing period instead of the last day assumed by the company. We feel it is reasonable to assume some customers pay early and some late, and an equitable balance is the midpoint. A disallowance of \$226,000 of average prepayments related to Old Home Manor, Inc. is adopted since this concern is no longer doing business with respondent. Also, we disallow an amount of \$505,000 in accordance with our treatment of 76-PRMD-10 (Billing Procedures) monthly billing will require a lesser amount of cash working capital.

We will reduce the company's cash working capital allowance to \$5,721,000. This includes the disallowance of any TMI-2 related funds.

#### Customer Advances for Construction

Respondent deducted customer advances for construction of \$588,000 from all measures of value. Staff opposes the treatment on the grounds that in respondent's last proceeding the Commission made it plain that any customer advances for construction deletions from measures of value or depreciation must be made in the same manner in which they had been included initially. The Commission Staff states this amount should be trended and a depreciation reserve for ratemaking purposes be established for this property.

Judges Banzhoff and Cohen concur that this item should be trended but, since Staff's methodology was not set out on the record, they felt constrained to accept respondent's method, deduction \$580,000 from all measures of value. Staff, while exception, does not present any arguments to support its position. We have no option on this record but to adopt the position recommended by Judges Banzhoff and Cohen.

### Other Deductions from Measures of Value

Consumer Advocate in its brief recommended three additional deductions from measures of value. These were \$516,000 for customer deposits, \$959,000 for net unamortized gain on reacquired debt, and \$1,703,000 contained in operating reserves. It was argued these three items are comprised of non-investor supplied capital, and any assets financed by this type of capital should not be allowed to earn a return. Therefore, appropriate treatment would be a deduction from measures of value. Moreover, it was pointed out we accorded similar treatment to Met-Ed's sister company, the Pennsylvania Electric Company, in its recent rate case (R.I.D. 392). Judges Banzhoff and Cohen found these adjustments proper and correspondingly reduced measures of value by \$3,178,000.

The respondent takes exception to the Administrative Law Judges' treatment of the net unamortized gain on reacquired debt. Respondent argues that consistent treatment of this area dictates offsetting adjustments. We do not feel respondent has set forth a convincing argument and maintained its burden of proof. We adopt the Judges' adjustments and correspondingly reduce measures of value by \$3,178,000.

### Depreciation Reserve

Respondent's calculated or theoretical depreciation reserve attributable to original cost plant in service was \$178,953,000 at March 31, 1977, the test-year end. Staff and Consumer Advocate raise several questions concerning the treatment of depreciation reserves.

Met Ed used expected life spans of 34 years for TMI-1 and 31 years for TMI-2 to coincide with their respective operating license expiration dates. Staff believes this restriction to lifespans is arbitrary and recommends lifespans of 40 years, comparable to fossil fuel generating plants. Issue is also taken to respondent's use of a 20 year estimated service life for combustion turbines. In its last rate case the company calculated depreciation on this equipment using a 25-year useful life. Staff feels respondent has not justified the need to reduce the estimated service life by five years. The Administrative Law Judges disagreed. Both Staff and Consumer Advocate recommend a reduction to depreciation reserve of \$245,000 for the faulty ring girder pour at TMI-1, the dollar amount related to their recommended disallowance of electric plant in service.

Consumer Advocate contended the reserve for depreciation should be increased for a year's depreciation on TMI-2, or a reduction in measures of value of \$6,289,000. This contention is based on the argument that since respondent is claiming a full-year's annual depreciation expense for TMI-2, it should also place a full year's calculated accrued depreciation in the reserve; otherwise, respondent after the first year accrual would overcollect in base rates. Staff takes no position, since it has

recommended total disallowance of TMI-2. Respondent disagreed because such an accrual would deny it a proper return on the portion of the rate base deducted. Judges Banzhoff and Cohen in their report assumed a half-year's accrued depreciation and thus deducted \$3,45,000 from all measures of value.

*Depreciation before completion?*

Staff excepts to the findings of the Judges on the estimated service lives for the same reasons discussed above. Consumer Advocate disagreed with the Judges' assumption of a half-year's accrued depreciation. It is claimed that this would grant respondent, after the first year, a greater return than its actual investment in TMI-2 would warrant. Respondent opposes the finding because it argues any reduction of its rate base by an amount of accrued depreciation associated with TMI-2 will forever deprive it of earning a return on the portion of the rate base deducted.

Staff's arguments on the estimated life spans of the TMI units have been rejected by the ALJs. We concur in this resolution. There is not sufficient experience with nuclear plants to establish a useful life with a high degree of precision. In view of the problems of nuclear waste and changing technologies, we agree with the Administrative Law Judges that a reasonable approach, at this time, is to set a useful life for these units (only TMI-1 is at issue here) at no more than the length of its operating license. Future adjustments can be made as more experience is gained. We also accept the use of 20 year estimated service lives for combustion turbines for the reasons stated by the Administrative Law Judges' in their initial decision. These turbines are used for peaking purposes and due to the periodic start ups and shut-downs inherent in such use, they deteriorate at a faster rate than if they were used consistently.

Due to our handling of TMI-2, we consider the related depreciation adjustments moot. As far as the faulty ring girder pour at TMI-1, our acceptance of the measure of value adjustment by its nature includes approval of a reduction to depreciation reserve of \$245,000.

#### Accumulated Deferred Income Taxes

The company deducted \$31,783,000 from all measures of value for accumulated deferred income taxes. Consumer Advocate recommended an additional deduction be made from rate base for the deferred taxes associated with TMI-2. The amount of this deduction would be \$4,198,000.

The arguments and counter arguments on this issue are similar to the one discussed earlier on depreciation related to TMI-2. The Administrative Law Judges adopted an approach consistent with the depreciation finding and found one-half or \$2,099,000 of the above amount as a deduction from measures of value. Staff and the Consumer Advocate except.

Due to our small stock of 1947 tax returns, the proposed adjustments have to be made by using our own records. We find as proper a deduction of \$11,757,000 from the measure of value for accumulated deferred income taxes.

#### Annual Depreciation and Amortization

Respondent claimed \$11,103,600 for annual depreciation on original cost of plant, including \$17,000 for net salvage and \$216,000 for its claim of a reserve deficiency. The amount of \$216,000 is an annual amortization to cover the claim by respondent of a deficiency in its reserve for depreciation in the amount of \$5,770,000.

Staff argued for a rejection of respondent's claim of \$216,000. Judges Banzhoff and Cohen found respondent had not shown this depreciation reserve deficiency to be genuine within the meaning of Pennsylvania Power & Light Company v. Pennsylvania Public Utility Commission and the Secretary of Defense of the United States, 10 Pa. Cmwlth Ct. 328, 311 A 2d 151 (1973).

Correspondingly, they disallowed the \$216,000 claim. Along with the elimination of \$95,000 of depreciation related to the faulty ring girder and \$134,000 in regard to respondent's use of component weighting in its annual depreciation claims the Judges reduced respondent's claim to \$30,658,000. There were no exceptions. We adopt the findings of the Administrative Law Judges.

#### FAIR VALUE

Respondent in its brief claims its fair value of plant should be at or near the spot price measure of value, or \$1,284,991,000. Both Staff and Consumer Advocate recommended a fair value finding substantially less than the claim of respondent.

Consumer Advocate proposed the fair value be the weighted average of original cost of \$835,114,000, as adjusted (including TMI-2), and five-year average trended original cost (adjusted) of \$1,178,442,000. The original cost was given a weight of 63%, while the five-year average trended original cost was given a weight of 37%. These weights are

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1/ In that case the Court stated at 10 Pa. Cmwlth Ct. 314:

The burden was upon PP&L to prove that deficiency in its book reserves was 'genuine.' In other words, it has failed to prove that during the period of time in which the deficiency was developed that it did not receive sufficient revenue to pay all of its operating expenses plus a fair return on the fair value of its property devoted to the public service. Therefore, the PUC was within its discretionary authority to reject the remaining life theory proposed by PP&L in this case.

simply the fixed-cost capital percentage and the equity capital percentage of the proposed capital structure. Using this approach, Consumer Advocate determined the fair value to be \$962,145,000, or roughly 115% of adjusted original cost.

Commission staff proposed a fair value of \$781,800,000. For purposes of comparison, an additional amount of \$169,563,000 for the TMI-2 investment added to the recommended fair value would total \$951,353,000. This total is about 110% of Staff's original cost (also adjusted for TMI-2) of \$863,012,000. The staff proposal was arrived at using the same concept advocated by Consumer Advocate. This concept makes an allowance for original cost to all debt and preferred capital investors and for trended original cost to common equity holders. The rationale is that all return dollars on fair value in excess of original cost will flow to the benefit of common equity holders. Judges Banzhoff and Cohen found the fair value to be \$965,000,000 which is 113.4% of original cost. This conclusion was reached after considering the following measures of value:

<u>Basis</u>	<u>Estimated Fair Value</u>
Original cost rate base, as adjusted	\$ 850,840,000
Equal weight to original cost as adjusted and 5-years average trended original cost, both as adjusted ( $\$850,840,000 + \$1,194,168,000 \div 2$ )	1,022,504,000
Equal weight to original cost, as adjusted and 3-year average trended original cost, as adjusted ( $\$850,840,000 + \$1,245,082,000 \div 2$ )	1,047,961,000
Original cost, as adjusted, 63 percent and trended original as adjusted at 3/31/77 prices at 37 percent ( $\$850,840,000 \times 63\% + \$1,269,106,000 \times 37\%$ )	1,005,598,000

On the basis of our resolution of the various disputes involving measures of value we find that the company's original cost rate base is \$686,016,000 as shown below:

TABLE  
Measures of Value  
(\$000 Omitted)

<u>Electric Plant</u>	
Electric Plant in Service	\$859,896
Nuclear Fuel in Reactor	8,683
Nuclear Fuel Spare Assemblies	2,077
Plant Held for Future Use	<u>532</u>
Total Plant	\$871,188
<u>Depreciation Reserve</u>	\$178,708
Net Electric Plant	\$692,480
<u>Additions to Rate Base</u>	
Coal Inventories	\$ 9,858
Oil Inventories	1,180
Other M & S Inventories	7,013
Deferred Energy Costs	7,247
Cash Working Capital	<u>5,721</u>
Total Additions	\$ 31,019
<u>Deductions from Rate Base</u>	
Customer Advances for Construction	\$ 588
Accumulated Deferred Investment Tax Credit	834
Accumulated Deferred Income Taxes (Net)	31,783
Internal Revenue Service Refunds	1,100
Operating Reserves	1,703
Customer Deposits	516
Net Unamortized Gain on Reacquired Debt	<u>959</u>
Total Deductions	\$ 37,483
Rate Base - Original Cost	\$686,016

Met-Ed has argued for a fair value of its rate base at or near the spot price measure of \$1,284,991,000, which would approximate the reproduction cost of its facilities. It is a position which has been considered and rejected by the Commission and the Courts. In both Pa. P.U.C. v. Pennsylvania Gas and Water Co., 19 Pa. Commonwealth Ct. 214 (1975) and the recent Pennsylvania Gas and Water Co. v. Pa. P.U.C., Pa. Commonwealth Ct. (No. 1523 C.P. 1976, Order issued December 21, 1977), the Courts have held that

there is no one formula or set of statistics to be used in determining fair value. Rather, a proper method would be a weighting of original cost and trended original cost.

We are required to give weight to the reproduction cost of the property based upon the fair average of prices for materials, labor and property in the determination of the present value of a utility's plant. Equitable Gas Co. v. Pa. P.U.C., 160 Pa. Superior Ct. 458 (1947).

Reliance on a single year's indexes could produce large distortions in valuation because of unusual occurrences or events. Also, it is our concern that the use of a single year's prices would contribute to the inflationary spiral since this would include the current inflation in the fair value finding used in our setting of base rates. Therefore, we believe a five-year average is more appropriate here than a single year's spot prices in the determination of the fair value of plant used and useful. A five-year average tends to smooth out major changes in equipment and plant. The burden of cost and the benefit of technological improvement can be more realistically appraised and incorporated in electric rates. On the basis of these views we believe use of a five-year average is both proper and prudent.

The five-year trended original cost of Met-Ed's rate base is shown in the table below:

<u>TABLE</u>	
<u>Five-Year Trended Original Cost</u>	
(\$000)	
Company Claim	<u>\$1,209,946</u>
<u>Minus</u>	
TMI No. 1 Ring Girder	3,150
Accrued Depreciation - Ring Girder	(245)
Spare Nuclear Assemblies	777
Cash Working Capital	4,684
TMI No. 2 - Plant	165,931
TMI No. 2 - Nuclear Fuel	5,527
TMI No. 2 - Deferred Energy Costs	(2,400)
Operating Reserves	1,703
Customer Deposits	516
Net Unamortized Gain on Reacquired Debt	<u>259</u>
Total Deductions	<u>180,602</u>
Total Five-Year Trended Original Cost	<u><u>\$1,029,344</u></u>

Trended original cost estimates contain inherent imperfections. Essentially, they are derived by using standard index numbers which are simply estimates of average increases in costs. Consequently, the use of these indexes to trend historical costs of existing plant cannot reflect technological improvements. Also, trended original costs aim to estimate a reproduction cost of plant facilities. With the benefit of today's technology the plant facilities of an electric service territory would never be replaced item for item. Therefore, it is important not to give a disproportionate weight to these estimates in determining the fair value of a utility's plant for rate making purposes. To do so would be over emphasizing past inflation and ignoring technological improvements and reduced operating costs to be found in the replacement of existing plant by facilities with new technological developments.

We favor the methodology of Consumer Advocate as the best estimate of fair value. Consumer Advocate proposes the use of a five year average trended original cost weighted at 37 percent, the percentage of equity capital contained in respondent's capital structure, and the original cost weighted at the percentage of debt capital of 63 percent. The only portion of the rate base trended should be the portion associated with the common equity percentage in respondent's capital structure. Thus, the effects of inflation, the reason for use of a fair value rate base, will be reflected only to the extent the plant is financed by common equity. The returns on debt securities and preferred stock, fixed contractual returns to investors, would be measured in terms of the original cost of such investment. Trending of the portion of the rate base financed by debt and preferred equity investors would provide common stockholders with a return in excess of our allowance. Using the Consumer Advocates methodology, we find Met-Ed's fair value to be \$813,047,000, as shown below.

<u>Rate Base</u>		<u>Weight</u>	<u>Weighted Rate Base</u>
Original Cost	\$ 686,016	63 Percent	\$432,190
Five Year Average Trended	\$1,029,344	<u>37 Percent</u>	<u>\$380,857</u>
Total		100 Percent	\$813,047

#### FAIR RETURN

The issues of capital structure and cost of common equity were contested by the parties. All parties agree on a 7.4% cost rate for preferred stock. Minor variations among the parties was evident for the cost rate of debt but a consensus would be 7.5%. There are differences of opinion, none of which are major, between the parties with respect to capital structure shown below:



TABLE III

Recommended Capital Structure

	<u>Respondent</u>	<u>Staff</u>	<u>Consumer Advocate</u>
Long-term Debt	48%	50%	49.32%
Preferred Stock	14	14	13.94
Common Stock	38	36	36.74

After considering the above positions, the Judges recommended use of the following capital structure:

Long-term Debt	49%
Preferred Stock	14%
Common Equity	37%

Respondent presented the testimony of Joseph F. Brennan, President of Associated Utilities Service, Inc. and its independent expert witness, on the subject of fair rate of return.

Mr. Brennan believed that there is no precise formula for determining the proper cost rate applicable to the common equity portion of a capital structure in such a study. In each case, informed judgment must be exercised on the basis of a number of relevant factors. The cost of common equity is what investors think it is. Moreover, the cost rate for equity should not be established based on any one theory or formula since investors employ an array of techniques. In his opinion, the best starting point for the judgmental process is an evaluation of earnings/price ratios. An earnings/price ratio can only be employed directly when the stock is publicly traded.

A second and related method is to observe the cost rate for common stock when new shares are sold, or the earnings/net proceeds ratios.

A third technique is the discounted cash flow (DCF), whereby the sum of the dividend yield and the expected growth rate in earnings is used as an indicative attraction rate or cost rate.

Mr. Brennan concluded that mid-1977 money market data was the best starting point for a judgment on a common equity cost rate. Using the starting point, the relevant market data, and the three methods mentioned above, the witness recommended a 12% rate on common equity to be applied to a fair value rate base that reflects at least in part the current day value of the company's facilities.

Consumer Advocate presented the testimony of Dr. Matityahu Marcus. Dr. Marcus recommended the company be allowed a rate of return on common equity of 12.7% to be applied to an original cost rate base. His conclusion was based primarily on a discounted cash flow (DCF) study. The study essentially estimates the expected rate of return by combining two components familiar to investors; namely, the dividend yield and the expected long-term growth rate. The dividend yield was estimated by examining monthly dividend yields over the past five years. The long-term growth rate component was determined by an examination and analysis of past growth rates in dividends, earnings per share, and book value per share. Summing the two components yielded a bare bones cost of equity of 11.9%. To this rate was added selling costs which produced the total cost rate of 12.7%.

Dr. Marcus corroborated this finding by using a comparable earnings study and a spread method. In the comparable earnings study he examined the average earnings experience and the varying returns for Moody's 24 electrical utilities and a group of 24 industries drawn at random from the Standard & Poors list of 400 stocks. The spread method was used to estimate the relationship between the premium of equity return over bond yields and the price to book ratio.

It is also the position of Consumer Advocate that respondent's financial condition since the last Commission finding at R.I.D. 170-171 has improved significantly. Thus, since an award of 13.7% may have been appropriate at that time, such an allowance now would be excessive in light of improved factors in the corporate picture. First, the company's construction budget for the next two years will be approximately \$50 million less than during the proceeding two years. Secondly, the company during 1978, even without rate relief will be able to virtually supply all its capital needs and retire \$34 million of short-term debt without going to the capital market.

Staff recommends a 10.75 - 11.25% common equity cost rate. The position of staff takes market related data of GPU as a starting point and compares it with the five-year 1972-1976 data of Moody's 24 public utilities Index, Mr. Brennan's 8 barometer group companies and the Standard & Poors 400 Stocks. This recommended cost rate would be applied to a 36% common equity ratio relative to a fair value rate base.

Judges Banzhoff and Cohen found merit in the positions taken by each of the parties. However, in their view, informed judgment, as opposed to a precise formula, is the final determinative of cost of equity. The ALJs, on the basis of this judgment, found a cost rate of common equity in the area of 10.75%. This finding would be based on a capital structure with 37% common equity capital. The overall recommendations of the Judges applicable to their fair value are shown below.

Metropolitan Edison Company  
Capital Structure and Cost Rates

	<u>Capital Structure</u>	<u>Cost Rate</u>	<u>Weighted Cost</u>
Debt	49%	7.5%	3.68%
Preferred Stock	14%	7.4%	1.04%
Common Equity	<u>37%</u>	10.75%	<u>3.98%</u>
	100%		8.70%

Consumer Advocate excepts to the Judges' recommended return on common equity of 10.75% to be applied to a fair value rate base or 13.94% to be applied to an original cost rate base. It is argued this finding is out of line with a recent Commission Pennsylvania Electric Company (Penelec), decision at R.I.D. 392 (Order adopted March 2, 1978), and fails to reflect the substantial improvements in the company's financial health since the last rate case. At R.I.D. 392 the Commission allowed Penelec an equity return of 13.5% on original cost. Consumer Advocate feels there are only two possible reasons to justify a return on equity to Met-Ed higher than 13.5%. First, a marked deterioration in financial market conditions which, in its view does not seem likely. Secondly, Met-Ed's weaker financial position in relation to Penelec might justify a higher equity return. Consumer Advocate argues that this is not the case: they are both operating subsidiaries of General Public Utilities. Furthermore, Met-Ed has a higher equity ratio than the consolidated GPU system which indicates relatively less financial risk. Thus, Consumer Advocate concludes that there is no justification for Met-Ed's higher equity return.

We agree with Consumer Advocate that the return on common equity recommended by the Administrative Law Judges is somewhat higher than that allowed in our recent decisions. In our Penelec decision we allowed an equity return of 13.5% on original cost. We also note that respondent has a higher equity ratio than the consolidated GPU system. However, this fact does not necessarily dictate a lower finding especially in light of the recent quickening of inflation expectations. Thus, we believe a return of 13.6% on book common equity would be appropriate. This equates to a return of 9.48% on fair value equity capital. The overall return on fair value is 8.22% shown below:

<u>Type</u>	<u>Ratio</u>	Cost	<u>Weighted Cost</u>
Long Term Debt	49%	7.50%	3.675%
Preferred	14	7.40	1.036
Common Equity	<u>37</u>	9.48	<u>3.508</u>
	100%		8.219%

## OPERATING REVENUES

Respondent had total operating revenues during the test year of \$276,600,000. Of this amount, \$208,126,000 reflects base rate revenue to which the company made an upward adjustment of \$1,082,000 to reflect its estimate for customer growth and growth in usage. The balance of the total is comprised of tax adjustment and energy and fuel clause revenues of \$61,415,000 which were eliminated for rate case purposes, and \$7,059,000 of other operating revenues.

Respondent stated it used the same normalization procedure as it had used in previous rate cases for estimating customer growth and growth in usage. In calculating customer growth Met Ed used the difference between the number of customers at the end of the test year and the average number of customers during that year. The increase in sales revenues was estimated from the expected usage of these additional customers during the entire test year. The calculation for consumption growth was based on the average annual percentage growth for each rate classification for the most recent three year period. An additional \$1,082,000 of annual operating revenues was imputed by respondent using these procedures.

Consumer Advocate takes issue with respondent's methodology of estimating growth in usage. The Consumer Advocate's witness used the same methodology which respondent's own witness presented in several proceedings before the New Jersey Board of Public Utilities. This alternative methodology uses the test year's booked revenues instead of a three-year average. The Consumer Advocate argues that growth during this three-year period was abnormally low and, therefore, the alternative methodology, accepted and used by respondent in other proceedings, is more appropriate. The Consumer Advocate's position would require an additional upward revenue adjustment of \$2,668,000, less recoupment revenues of \$437,000, or a net adjustment of \$2,231,000.

Judges Banzhoff and Cohen agreed with the Consumer Advocate that respondent's estimate of a 2.5 percent increase in customer usage is unreasonably low. They considered that respondent experienced a 7.5 percent increase in customer usage from 1975 to 1976 and a 7.3 percent growth rate during the test year. They recommended that revenues be further adjusted upward by \$1,700,000 (including \$13,000 of other operating revenue) resulting in a finding of total revenues under proposed rates of \$269,228,000.

Respondent excepts on the grounds that a further normalizing adjustment is necessary to reflect the effect of abnormal weather conditions upon customer usage. The Judges' accepted the Consumer Advocate's position that use of the 12 month period ended September 30, 1977 instead of the historical test year period more accurately reflects normal weather conditions.

The Consumer Advocate also objects to the Judges' revenue determination; arguing that recognition must be given to \$544,000 in base revenues related to the share of the cost of construction power sold by Met-Ed to Penelec and Jersey Central during the construction of TMI-2. Any loss of sales upon the completion of construction would more than be replaced by growth in customer usage and by the addition of other customers.

We reject the exceptions raised by both respondent and Consumer Advocate. While selection of a test year is a choice of respondent, it should be a period representative of all aspects of the company's operations. Reliance placed on the use of the 12 month period ending September 30, 1977 does this.

Consumer Advocate contends that recognition of \$544,000 in base revenues related to construction power sold to Penelec and Jersey Central is proper, since on completion of construction sales would more than be made up by growth in usage and customers. We find this contention speculative and without support in the record.

We accept the operating revenue findings of the Administrative Law Judges.

#### OPERATING EXPENSES

During the test year the company incurred total operation and maintenance expenses of \$140,247,000. Numerous operating expense adjustments, exclusive of taxes and depreciation, were made reducing test year expenses by \$51,577,000 to reflect the level of operations at the end of the test year, March 31, 1977. Additional upward adjustments to operation and maintenance expenses of \$3,023,000 were made to reflect the costs associated with the commercial operation of TMI-2. Before the close of the proceeding, respondent made other normalizing adjustments in the amount of \$1,749,000. These adjustments produce a total claimed operation and maintenance expense at proposed rates of \$93,442,000. The contended issues and adjustments will be discussed in the following sections.

#### 76-PRMD-10

Both the Staff and Consumer Advocate favor disallowance of \$1,730,000 in operating expenses claimed by respondent to implement regulations covering consumer standards and billing practices for residential service, as proposed by the Commission at 76-PRMD-10. This claim includes the initial expenditures for bill inserts, programming costs and training expenses required to implement the monthly billing provisions. There were also annual operating expenses to implement a monthly meter reading and monthly billing program.

Judges Banzhoff and Cohen disallowed respondent's \$1,730,000 claim. Their report found the claim unsupported in as much as the Commission, at that time, had not issued a final order and respondent has not yet committed itself to these expenditures.

Respondent excepts to the wording of the recommended decision. The company feels it should be allowed the \$1,730,000 for the implementation of 76-PRMD-10 if it is so ordered by the Commission prior to a final order in this proceeding.

Since the issuance of the Judges' initial decision, the Commission on April 13, 1978 has approved Consumer Standards and Billing Practices Rules (76-PRMD-10) in a different form than that envisioned by the company in the original filing in that monthly meter reading has not been mandated. We disallow, therefore, \$590,000 of respondent's claimed operating expenses which represents the cost of monthly meter reading.

#### Three Mile Island Unit No. 2

Metropolitan Edison claimed operation and maintenance expenses related to the inclusion of Three Mile Island Unit No. 2 (TMI-2) in its test year ended March 31, 1977. Respondent considers its claim to be conservative as it reflects TMI-2 at a mature level of operations, meaning a level subsequent to the first few years of operations. The first few years of a plant's operation normally contain extraordinary operation and maintenance problems.

Adjustments of \$3,568,000 to operation and maintenance expense, \$1,295,000 for payroll and \$2,273,000 for other operation and maintenance, have been made to cover the operating costs of TMI-2. In view of our decision to exclude TMI-2 from consideration in this rate proceeding, we will disallow these claims.

#### Provision for Decommissioning of Nuclear Plant

The company claimed annual decommissioning provisions of \$620,000 for TMI-1 and \$290,000 for TMI-2, or a total annual provision of \$910,000. To arrive at these claims respondent divided the cost of decommissioning for each unit by the estimated remaining life for each times its percentage share (i.e., \$37.2 million divided by 30 years for TMI-1 times 50% and \$35.9 million divided by 31 years for TMI-2 times 25%). The estimated remaining lives correspond to the expiration date of the respective operating licenses being 2008 for TMI-1 and 2009 for TMI-2. Respondent's claim is based on the concept that rate payers who receive the energy generated by the nuclear units at Three Mile Island should bear the costs of decommissioning.

Witness of respondent presented the technical background to the decommissioning of a nuclear plant. Basically, the guidelines have

been set down by the Nuclear Regulatory Commission. There are four possible alternative methods of decommissioning nuclear facilities, each requiring a proposal, review, and approval before authorization can be granted by the NRC. Respondent's witness concluded the in-place entombment method with the cost estimate claimed in this proceeding involved the lowest cost of any method expected to be available in 2008 and 2009. Respondent believes these cost estimates are conservative, for 1977 dollars will buy substantially less in the years 2008 - 2009 due to escalating costs in the interim. Also, more stringent requirements by nuclear regulatory agencies involving greater costs can be expected.

Respondent proposes to invest any funds allowed for decommissioning in tax-exempt securities under the control of an independent trustee. These funds would be used exclusively for the purpose intended. Any earnings realized from this reserve would be used to offset the escalation of decommissioning costs.

Consumer Advocate opposes a decommissioning costs allowance. Its position is based on the Commission order in the last Met-Ed case at R.I.D. No. 170-171, Metropolitan Edison Company, 50 Pa. P.U.C. 82 (1976). The Commission rejected a similar proposal in that proceeding. In the instant proceeding the Consumer Advocate recognizes a difference in the claim in that respondent now proposes to invest the annual allowances in tax-exempt securities under the control of an independent trustee.

Consumer Advocate believes that in the prior proceeding mentioned above the Commission cited Penn Sheraton Hotel et al. v. Pennsylvania Public Utility Commission, 198 Pa. Super. Ct. 618 (1962) precludes the establishment of a provision for decommissioning. It bases its conclusion on the argument that Penn Sheraton and this claim both involve recognition of prospective negative salvage, and both proposed the same amortization of the net cost of removal upon retirement. Also, Consumer Advocate argues the estimated costs and remaining lives used by respondent are highly speculative.

Staff, in its brief, also bases its opposition to respondent's decommissioning expense claim on respondent's last rate proceeding at R.I.D. No. 170.

The Administrative Law Judges urge the Commission to reconsider its earlier decision. Accordingly, they recommended that respondent be allowed an annual expenses for the decommissioning of TMI-1 and TMI-2 in the amount of \$301,000. This annual amount is simply an amount to be invested each year in a thirty year annuity at a 6 1/2% interest rate compounded semi-annually necessary to produce the costs of decommissioning at the end of the annuity period.

We accept the principle that some allowance should be made for decommissioning expenses. Previously, we approved a similar claim of respondent's sister company at R.I.D. No. 392, Pennsylvania Electric Company (Order Adopted March 1978). Again, we are motivated by our concern for the future health and safety of the citizens of the Commonwealth. Our action in this proceeding is an initial step to protect future citizens from bearing a significant revenue burden associated with decommissioning this plant, a plant from which they will receive no service.

Both Commission Staff and Consumer Advocate argue in briefs and exceptions that Penn Sheraton Hotel et al. v. Pa. P.U.C. 198 Pa. Super. 618 (1962) sets a precedent which precludes an allowance for decommissioning expenses. We agree with the Judges that this case does not support those parties' position. The Penn Sheraton case discussed the prospective negative salvage value of the removal of steam distribution mains upon retirement. The Superior Court in its decision defined prospective negative salvage as "the estimated negative salvage to be incurred if and when the distribution mains are removed some time in the future." (emphasis added.)

We feel it is necessary to begin to provide a financial mechanism for the control of hazardous nuclear plant components. At the same time we must assure that the costs of the nuclear technology enjoyed today is not burdened on future ratepayers. Although the total costs of decommissioning a nuclear power plant cannot be precisely determined our overriding concern is for the health and safety of the citizens of this Commonwealth.

Met-Ed's claim for in-place entombment of Three Mile Island Unit No. 1 was an annual provision designed to accumulate its share of \$37.2 million, estimated TMI-1 decommissioning costs in 1977 dollars, in a separate fund by the year 2000. Consistent with our Penelec decision, we reduce the estimate of \$37.2 million by \$13.6 million, the amount allocated to the dismantling of non-nuclear structures. Neither the turbine buildings, cooling towers, river water pump house, and miscellaneous structures pose a continuing threat to health and safety. All of these components should be considered the "prospective negative salvage" referred to in the Penn Sheraton case. Our allowance in this matter then will only be sufficient to accumulate the \$23.6 million viewed as necessary to contain the nuclear components upon decommissioning.

Finally, the calculation by Met-Ed for allowance of decommissioning expenses is improper. This Commission should reject the assumption that inflation will continue through the year 2008 and that the interest earned upon respondent's annual investment in tax-exempt securities would offset that inflation. At this time we should make no provision for inflation, but rather adjust the annual allowance from time to time to account for any experienced inflation. If we would permit Met-Ed to collect \$132,000 annually and to invest in tax-exempt, state and/or



municipal serucities with an annual yield to maturity of 6.5%, by 2008 it would have accumulated the established \$23.6 million to be used for the decommissioning of the nuclear components of TMI-1.

This \$132,000 annuity should be treated in the following manner:

1. The annuity and its accumulated interest shall be placed in an escrow fund, unavailable to Metropolitan Edison until the dismantling of Three Mile Island No. 1 occurs. One-twelfth of the annuity will be deposited in the fund at the end of each calendar month.

2. Each fund investment by the escrow agent shall be in those tax-exempt state, municipal, and/or Authority bonds having the highest yield at the time the investment occurs. (The interest on such bonds is free of both state and federal income taxes, and thus served to reduce the amount of the burden on the ratepayers.)

3. A strict accounting shall be maintained for the fund, so that its balance can be determined at any moment in time. Thus, if at any time there is a change in the estimated life of TMI-1, in the decontamination and dismantling costs, in the proposed method of decommissioning, or in the average yield on the proposed bonds, the difference between the projected costs and the amount already accumulated in the fund can be readily ascertained, and the annual annuity requirement on the remainder can be readily computed.

4. It is expected that by following the procedure herein, the difference between the total amount of the fund which will have been accumulated and the actual costs incurred at decommissioning will be de minimis. However, if there is any excess whatever in the fund, Metropolitan Edison shall return the excess to the ratepayers or use it for their direct benefit in any other manner that the Commission may order; and conversely, if the costs exceed the amount of the fund, Metropolitan Edison shall amortize the excess as a charge over a reasonable period as ordered by the Commission.

Using these provisions, not only will the interest on the escrowed fund be free of state and federal income taxes, but the annuity itself may be excluded from taxable income.

Decommissioning expenses must be considered in this proceeding, and current ratepayers who are benefitting from the generation of TMI-1 should be the ones who contribute toward the cost of the eventual decommissioning of that facility. An annuity of \$132,000 is sufficient to provide \$23.6 million, the current estimate for the proper containment (by the in-place entombment method) of the nuclear components of TMI-1. The accumulation of this decommissioning fund shall be used only for the purposes of the eventual decommissioning of that plant, and as such should not be deducted from rate base.

The original claim was for an annual decommissioning expense of \$620,000. An annual provision of \$132,000 represents a disallowance of \$488,000.

#### Out of Period Wage Adjustment

Respondent claimed an additional \$1,310,000 to reflect the full year's effect of an 8.07 percent wage increase granted to Met-Ed's weekly employees effective May 1, 1977. Consumer Advocate argues against this claim in its brief, claiming that respondent has not recognized any post test-year revenues growth as an offset to the wage increase. The Administrative Law Judges rejected the argument of Consumer Advocate stating that the Commission has discretion to make such adjustments. Pittsburgh v. Pennsylvania P.U.C., 171 Pa. Super. Ct. 187 (1952).

It is argued by Consumer Advocate that the Judges have confused two separate arguments with regard to the out-of-period wage adjustment. The Judges' recognition of the adjustment proposed by the Consumer Advocate reflects revenues as of March 31, 1977, the last day of the test year, but it does not account for revenue growth in 1978 and 1979. The Consumer Advocate feels the revenue growth in 1978 and 1979 will more than absorb this out-of-period wage adjustment.

The Administrative Law Judges recommended adoption of this adjustment. We agree with that result. A wage increase effective May 1, 1977, only one month after the end of the year should be reflected in the rate allowance set here. Use of revenue growth in 1978 and 1979 by Consumer Advocate as an offset, is not reasonable.

#### Uncollectible Accounts Expense

Staff in its brief urges that an adjustment to uncollectible expense be made. Position of Staff is centered around a comparison of reported test year uncollectibles and the historically experienced costs. Respondent's reported test year uncollectible expenses of \$620,000 includes \$168,000 due to the termination of business of National Portland Cement, a major industrial customer of respondent. The 1976 budget for uncollectibles (exclusive of the \$768,000) would be in the area of \$550,000, or roughly nine percent greater than the 1975 actual. Application of the same nine percent to the 1976 actual of \$507,000 would produce an allowable uncollectible accounts expense of \$560,000 or \$60,000 less than respondents claimed test year expenses of \$620,000. The Administrative Law Judges concurred in Staff's position and Met-Ed does not except. We will therefore reduce the Company's adjusted expenses by \$60,000.

### Miscellaneous Expenses

Judges Banzhoff and Cohen made three miscellaneous adjustments to operating expenses related to findings discussed in other sections of their recommended decision. In accordance with their upward adjustment of \$1,687,000 to base rate revenues, they increased the allowance for total energy expenses in the amount of \$164,860. The Judges treated the net gain on reacquisition of debt of \$52,000 as a deduction from rate base and correspondingly moved the annual amortization of this net gain above the line and treated it as a reduction to other operating expenses. The other miscellaneous adjustment was an allowance to operating expenses in the amount of \$19,000 to reflect the interest on customer deposits respondent is required to pay. The parties did not except, and we will therefore increase the company's adjusted expenses by \$132,000.

### Conclusion

As a result of our resolution of the disputed issues we determine test year operating expenses (excluding TMI No. 2) to be \$114,384,000.

TABLE IV

#### Operating Expenses

##### All Figures Excluding TMI No. 2

Operating Expenses for test year as adjusted by Met-Ed excluding taxes	\$155,881,000
Adjusted Taxes for Test Year	<u>40,028,000</u>
Total Operating Expenses	115,853,000
Adjustments to Claimed Expenses	
A) Expenses Related to Operating Revenues Growth due to Customer Growth and Growth in Usage	\$ 165,000
B) 76-PRMD-10 Practices	(590,000)
C) Component Weighting in Annual Depreciation	(134,000)
D) Faulty Ring Girder Depreciation	(95,000)
E) Customer Advances for Construction Deprec.	(18,000)
F) Decommissioning Expenses	(488,000)
G) Amortization for Depreciation Reserve Deficiency	(216,000)
H) Interest on Customer Deposits	19,000
I) Amortization of Net Gain on Reacquisition of Debt	(52,000)
J) Uncollectible Accounts	<u>(60,000)</u>
Total Adjustments	\$ (1,469,000)
Net Operating Expenses	\$114,384,000

Savings Associated with Holding Company Debt

Respondent in the calculation of its test year federal income taxes included a reduction of \$543,000 for tax savings. This represents Met-Ed's share of consolidated income tax savings it derives because of the interest expense associated with money borrowed by its parent General Public Utilities (GPU). Consumer Advocate disputes this calculation and proposed its own adjustment.

GPU borrowed \$50 million by issuing long-term debt and then used these borrowed funds to purchase additional common stock in Met-Ed and other subsidiaries. These funds were borrowed at an interest rate of 8.05 percent. Consumer Advocate is of the opinion that this results in Met-Ed and GPU earning an equity rate of return on funds which carry the 8.05 percent debt interest rate. Consequently, Consumer Advocate proposed an upward adjustment to net income of \$654,000, an amount equal to the difference in earnings on the borrowed funds at the common equity rate of 12.7 percent and the actual debt interest cost rate to GPU of 8.05 percent. Judges Banzhoff and Cohen rejected the proposed adjustment indicating the matter is more a cost of capital consideration. Consumer Advocate excepts.

The Consumer Advocate feels the Judges erred in their lack of treatment of this issue. In their findings the Judges viewed the issue as one of rate of return rather than revenue and expenses. However, they did not consider the issue in conjunction with rate of return. Consumer Advocate stated Met-Ed's share of the funds provided from the GPU debt during the test year was \$14,066,000. Therefore, based on the product of these funds and the difference between the Judges' 13.94 percent rate of return and the debt interest rate, Consumer Advocate argued respondent's net income should be increased by \$828,000. Consumer Advocate admitted the matter could have been considered as part of a rate of return finding but chose the recommended adjustment to net income, a computational short-cut.

A similar, but not identical, issue was decided in our recent decision issued at R.I.D. 367 (Bell Telephone of Pennsylvania). In that proceeding we treated the income tax consequences of the debt issued by AT&T to finance Bell as though the debt had been issued by Bell itself. The principle enunciated was that a holding company, in that case AT&T, should not be free to issue debt in its own capital structure, finance a utility subsidiary with these funds in the form of equity, and then retain all the benefits of this conversion. E.g., Smith v. Illinois Bell Telephone Co., 282 U.S. 133 (1930); Lindheimer v. Illinois Bell Telephone Co., 292 U.S. 151 (1934); Bell Telephone Co. of Pennsylvania, 45 Pa. P.U.C. 675 (1971); South Central Bell Telephone Co. v. P.S.C. 100 PUR 3d45 (Tenn. Ch. 1973); West Coast Telephone Co. of California, 48 PUR3d 89 (1963); Chesapeak and Potomac Telephone Co., 4 PUR 4th 1 (L.C. 1974); New England Telephone and Telegraph Co., 13 PUR 4th 65 (Maine, 1976); and New York Telephone Co., 84 PUR 3d 321 (1970).

We agree with the position of the Consumer advocate. Our authorized rate of return is sufficient to cover the contractually determined interest on debt, dividends on preferred stock and a common shareholder return of 13.6 percent on original cost. A portion of Met-Ed's equity, however, is actually financed by debt issued by GPU. Since the common stock of respondent is wholly owned by GPU, when GPU issued its debentures at 8.05 percent, part of the proceeds, or \$14,066,000, were allocated to Met-Ed. Since Met-Ed issues its own debt and preferred and GPU is its only stockholder, the allocated funds are included in the capital structure as common equity. These funds should earn 8.05 percent, their actual cost, rather than the common equity return of 13.6 percent.

We conclude, therefore, respondent will realize an additional net income of \$780,700. This is a product of the allocated funds of \$14,066,000 and 5.55 percent, the difference between our common equity allowance and the interest cost of the issued debentures. We impute and attribute additional operating revenues of \$1,646,800 along with associated taxes.

At the same time we note respondent has reduced its federal income tax claim by \$543,000 to reflect consolidated income tax savings related to the interest on GPU debt used to finance its common equity. Our finding of additional net income for the allocated funds is a complete recognition of the effect on respondent of its equity financed by GPU debt. Therefore, the consolidated income tax savings of \$543,000 should be netted out of \$1,145,500 savings in operating revenues. We therefore will attribute additional operating revenues of \$501,300.

#### RATE STRUCTURE

Met-Ed proposed a rate structure as part of Tariff No. 42 which in its opinion is in continuance of the concepts approved by the Commission at R.I.D. No. 170 and 171. In support of its rate structure, respondent submitted a cost of service study covering the test year, the twelve months ending March 31, 1977. A number of rate structure issues were raised by industrial complainant St. Regis Paper Company, Consumer advocate and Commission Staff.

Complainant St. Regis Paper argues that there are numerous errors in the cost of service study. It feels transmission maintenance expenses, distribution maintenance expenses, substation maintenance expenses and demand-related fuel expenses should be allocated to the various customer classes on the basis of production demand responsibility. These maintenance expenses, which clearly do not vary with load, were allocated by respondent on the basis of energy costs. Also, complainant argues respondent's rate design allocation of increased demand costs to the LP class discriminates against the high load factor user. And finally, it is the contention of complainant that the industrial LP

class is providing a higher rate of return established by the cost of service study than is equitable. Judges Banzhoff and Cohen found complainant's arguments not supportative of its burden of whosing the industrial rates to be arbitrary capricious or unreasonable.

Consumer Advocate raised three major objections to the proposed rate structure. First, common costs are arbitrarily allocated on a customer rather than on a demandor energy basis resulting in a minimum overcharge of \$8.8 million to residential customers. Secondly, while Met-Ed favors incremental pricing as a goal, it is not reflected to the best of its ability in rate structure since its cost of supplying electricity in the summer is less than the cost during the winter. It is also argued the rate RST (residential time of day) is poorly conceived. Consumer Advocate favors revisions in the base rates and reductions in the customer charge from \$11.50 to \$7.50 per month, which charge would not include a minimum number of KWH per month. In their recommended decision the Administrative Law Judges rejected these arguments.

Staff takes issue with respondent's proposed rate structure. Staff recommends that respondent file an optional separately metered off-peak rate for any residential customer in its service territory. Although the Commission staff support rate RST, they recommend respondent promote it more extensively. After an analysis of the approaches of staff and Consumer Advocate, Judges Banzhoff and Cohen were not convinced a change in rate structure is warranted at this time.

The recommended decision of the Administrative Law Judges found the summer-winter rate differential presently in effect should be eliminated and the proposed \$6.00 service charge for connection of service at any particular location should be implemented.

Staff excepts to this recommendation for three reasons. The recommended decision failed to direct the company to provide monthly billing comparisons for its RST customers between the RST rate and other applicable rates. A comparison of this sort is considered essential by the Staff to encourage off-peak consumption and discourage on-peak consumption. The Judges' report also failed to direct Met-Ed to provide an optional, controlled off-peak residential race. This failure is contrary to one of the recommendations contained in 76-PRMD-7, the Commission's generic electric rate structure investigation. Thirdly, the Staff stated the recommended decision failed to direct respondent to enforce demand metering and demand charge provisions for residential customer load in excess of 25 KW.

The Consumer Advocate also takes exception to the recommended decision on three issues. The Judges erred, it is claimed, in failing to reallocated common costs on a class demand or class energy basis, and this error resulted in a minimum overcharge of \$8.8 million in revenues to the residential class. Also, the recommended decision was in error in its acceptance of the company's time of day rate RST. This

rate tariff is inconsistent with the actual incurrence of incremental costs in that the tariff is designed to cover higher costs in the summer as opposed to the winter when the converse is true. Consumer Advocate excepts to the Judges' finding of the company's \$11.50 customer charge in rate RST since it exceeds the customer charge for regular residential service by more than the incremental cost of providing such service.

Since billing comparisons for RST customers can be useful, we believe an approach using annual billing comparisons is appropriate. An annual comparison is a logical first step and, if necessary, further comparisons can be developed at a later time. We deny the exception of Staff and adopt the recommendation of the Administrative Law Judges. We will also approve the imposition of a \$6.00 service charge for construction of service at any particular location as proposed by respondent.

The failure of the Judges to direct the company to provide an optional off-peak rate and to enforce demand metering and demand charge provisions for residential customer load in excess of 25 Kw were additional exceptions raised by Staff. Both exceptions have merit and will be granted. We direct respondent to provide an optional, controlled off-peak residential rate. We also direct respondent to enforce the demand metering and demand charge provisions for residential customer load in excess of 25 Kw.

The tariff of Met-Ed contains a customer charge of \$11.50 per month for the RST rate. Consumer Advocate has excepted, and we believe a compromise approach is proper. This approach would necessitate a review and restructuring of the RS customer charge of \$4.50 and a revision of the minimum KWh per month provision. Theoretically, the best way to resolve this problem is the setting of both customer charges at rates approximating their costs; namely, \$11.50 for RST and \$8.50 for RS as advocated by Staff. However, such a drastic increase in the minimum charges for RS customers would be inappropriate. Our resolution of the common cost allocation controversy would reduce the customer costs upon which charges are based. Also, a reduction in the number of Kwh per month included in the fixed minimum charge from 20 Kwh to 1 Kwh would enable further reduction in the fixed charges. We direct that the RST and RS customer charges should uniformly reflect costs, resulting in a \$3 differential between the two rates. These charges will include an allowance of 1 Kwh per month, a reduction from the proposed 20 Kwh per month. We feel the level of these rates should be somewhat below the \$11.50 and \$8.50 proposed by Staff.

Consumer Advocate excepted to the reallocation of common costs recommended by the Administrative Law Judges. After considering the record here, we believe an appropriate resolution would be to allocate 50 percent of these costs on the basis of number of customers and 50 percent on the basis of coincident demand. This allocation will have the effect also of moving rates closer to what they would be if

they were based on incremental or marginal costs. Thus, by increasing the portion of costs allocated to coincident demand as in this compromise, the more price-elastic, usage sensitive portion of the rates will be increased relative to fixed charges, and the incentive for energy conservation will be increased.

We adopt also the position of complainant St. Regis Paper that the allocation of transmission and distribution maintenance expense, substation maintenance expenses and demand dated fuel expenses should be allocated to the various customer classes on the basis of production demand responsibility. The decision of the Administrative Law Judges recommended the summer-winter rate differential now in effect should be eliminated. We do not agree. Met-Ed's proposal for seasonal rates higher in the summer has merit because the PJM system is a summer peaking system, resulting in higher incremental capacity costs during the summer. We agree with the Consumer Advocate on the elimination of declining tail blocks in all residential rates. This finding is consistent with our action to implement recommendation number 3 contained in 76-PRMD-7. The recommendation read, "all declining block energy only "KWH" rates should be phased out and replaced with a rate form consisting of an appropriate customer charge and a flat energy charge."

In all other respects we adopt the recommendations of the Administrative Law Judges with respect to rate design.

#### CONCLUSION

As a result of our resolution of the many issues presented here, we determine that Met-Ed has shown the need for total additional revenue relief of \$2,771,900. Of this amount, \$2,561,700 should come from Pennsylvania retail customers. (Appendix A). The company is directed to file tariffs reflecting this level of rate relief and our changes in rate structure; THEREFORE,

#### IT IS ORDERED:

1. That the complaints listed in the caption of this proceeding are sustained to the extent indicated.
2. That the respondent forthwith file tariff supplements cancelling its proposed revisions to its Tariff Electric-Pa. P.U.C. No. 42.
3. That respondent is authorized to file within 30 days after the date of entry of this Order, as it may elect, tariff revisions consistent with our above Order, designed to provide total annual operating revenues of \$224,624,000 (exclusive of revenues from the State Tax Adjustment Surcharge and the Fuel Adjustment Clause), as computed and allowed herein at the level of operation at March 31, 1977.



4. That detailed calculations be filed with these tariffs or tariff supplements, demonstrating that the rates do comply with the requirements set forth in this Order.

5. That respondent may file a detailed plan of recoupment of revenues from application of the allowable rates for service rendered on May 30, 1978, and thereafter, to the date the increased rates approved herein are applied.

6. That the surcharge authorized by our State Tax Adjustment Surcharge Order of March 10, 1970, be recomputed and revised in accordance with Section B, paragraph 2, of that order.

7. That, to the extent consistent with the above Order, the initial decision of Administrative Law Judges Harry Banzhoff and Joseph Cohen is adopted as the Order of this Commission.

8. That, except as granted in the above Order, all exceptions to the initial decision of the Administrative Law Judges in this proceeding are denied.

BY THE COMMISSION,  
*C. J. McElwee*  
C. J. McElwee  
Secretary

(SEAL)

ORDER ADOPTED: May 23 and May 31, 1978

ORDER ENTERED: SEP 18 1978

Appendix A

1. Fair Value	\$813,047,000
2. Rate of Return	0.0822
3. Total Allowable Return (Line 1 x Line 2)	\$ 66,838,000
4. Income Available (A)	\$ 65,524,000
5. Income Deficiency (Line 3 - Line 4)	\$ 1,314,000
6. Revenue Deficiency (Line 5 x Revenue Factor of 2.1095)	\$ 2,771,900
7. Total Revenue Request	\$ 47,902,582
8. Percent of Request Allowed (Line 6 ÷ Line 7)	5.79
9. Total Pennsylvania Retail Revenue Request	\$ 44,244,531
10. Total Pennsylvania Retail Revenue Allowance (Line 9 x Line 8)	\$ 2,561,700
(A) Income Available for Return without Three Mile Island Unit No. 2.	

Summary of Revenues, Expenses and Taxes  
000's

	Test Year 12 Months Ended <u>3/31/77</u>	Under Present Rates		Test Year 3/31/77 Adjusted	Commission Adjustments	Additional Revenue Allowance	Commission Allowance
		Normalizing Adjustments	Adjustments Excluding TMI-2				
<b>OPERATING REVENUES</b>							
Customer Growth & Growth in Usage					1,687		
Sechtelsville Rent					13		
Savings Associated with Holding Company Debt					501		
<b>Total</b>	<b>276,600</b>	<b>(56,975)</b>	<b>26</b>	<b>219,651</b>	<b>2,201</b>	<b>2,772</b>	<b>224,624</b>
<b>OPERATING EXPENSES</b>							
Expenses Due to Customer Growth & Growth in Usage					165		
76-PRMD-10 Practices Component Weighting					(590)		
Faulty Ring Girder					(134)		
Customer Advances for Construction					(95)		
Decommissioning					(18)		
Amortization for Depreciation Reserve Deficiency					(488)		
Interest on Customer Deposits					(216)		
Amortization of Net Gain on Reacquisition of Debt					19		
Uncollectible Accounts					(52)		
					(60)		
<b>Total</b>	<b>162,801</b>	<b>(48,770)</b>	<b>1,822</b>	<b>115,853</b>	<b>(1,469)</b>	<b>-</b>	<b>114,384</b>
<b>TAXES</b>							
Taxes, Other than Income	21,272	(13,389)	76	7,959	44	55	8,059
State income	3,568	60	(123)	3,485	253	190	3,927
Federal Income	12,415	7,732	(790)	19,357	1,619	1,213	22,189
Deferred Income Taxes	10,432	(2,513)	-	7,919	-	-	7,919
Investment Tax							
Credit - Net	1,443	-	-	1,443	-	-	1,443
Income Tax Refund	-	(135)	-	(135)	-	-	(135)
<b>Total</b>	<b>49,130</b>	<b>(8,265)</b>	<b>(837)</b>	<b>40,028</b>	<b>1,916</b>	<b>1,458</b>	<b>43,402</b>
<b>Net Income Available for Return</b>	<b>64,669</b>	<b>60</b>	<b>(959)</b>	<b>63,770</b>	<b>1,754</b>	<b>1,314</b>	<b>66,838</b>