COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
P.O. BOX 3265, HARRISBURG, PA 17105-3265

ISSUED: July 31, 1995 KJR

IN REPLY PLEASE REFER TO OUR FILE

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R-00943271
R-00943271
C0001-C0145

PAUL E RUSSELL ESQ
PENNSYLVANIA POWER AND LIGHT COMPANY
TWO NORTH NINTH STREET
ALLENTOWN PA 18101-1179

Pennsylvania Public Utility Commission, et al., v.
Pennsylvania Power and Light Company

TO WHOM IT MAY CONCERN:

Enclosed is a copy of the Recommended Decision of Administrative Law Judge Robert A. Christianson.

An original and nine (9) copies of signed exceptions to the decision, if any, MUST BE FILED WITH THE SECRETARY OF THE COMMISSION IN ROOM B-20, NORTH OFFICE BUILDING, NORTH STREET AND COMMONWEALTH AVENUE, HARRISBURG, PA OR MAILED TO P.O. BOX 3265, HARRISBURG, PA 17105-3265; a copy in the hands of the Office of Special Assistants, Room 210; and a copy in the hands of each party of record no later than August 14, 1995. 52 Pa. Code §1.56(b) cannot be used to extend the prescribed period for the filing of exceptions or reply exceptions.

Replies to exceptions, if any, must be served on the Secretary of the Commission, in the manner described above, no later than August 21, 1995 as well as served upon the parties.

Exceptions and reply exceptions shall obey 52 Pa. Code 5.533 and 5.535, except the page limitation. There shall be a 60-page limit for exceptions and a 40-page limit for replies to exceptions. Exceptions should be clearly labeled as "EXCEPTIONS OF (name of party) - (protestant, complainant, staff, etc.)".

Any reference to specific sections of the Administrative Law Judge's Recommended Decision shall include the page number(s) of the cited section of the decision.

All timely filed exceptions and replies thereto will be submitted to the Commission for consideration at Public Meeting. Late filed exceptions and late filed replies might not be considered by the Commission. This decision will be listed on the agenda for Public Meeting on August 31, 1995.

cc: ALJ CHRISTIANSON/OFFICE OF ALJ/OSA/OCA/PIO/LAW/OTS/OSA-TARIFF/CEEP/AUDITS/OUR FILE/NEW FILE/CHAIRMAN/COMMISSIONERS

Very truly yours,

las See attached list for additional parties of record.

Robert A. Christianson

Encls.
Certified Mail
Receipt Requested

Robert A. Christianson
Acting Chief Administrative Law Judge

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-00943271
Gary M. Bootay and Kimberly Meadows	:	R-00943271C0001
Vickie Mackin	:	R-00943271C0002
Swatara Township	:	R-00943271C0003
Jack A. Baker	:	R-00943271C0004
Elaine Scheidler	:	R-00943271C0005
Harold C. Landes	:	R-00943271C0006
Laura N. Hager	:	R-00943271C0007
Office of Consumer Advocate	:	R-00943271C0008
Wallace R. & Doris M. Fenner	:	R-00943271C0009
Samuel P. Kalny	:	R-00943271C0010
Michael P. McLain	:	R-00943271C0011
PP&L Industrial Customer Alliance	:	R-00943271C0012
Office of Small Business Advocate	:	R-00943271C0013
Department of Defense and the Federal Executive Agencies	:	R-00943271C0014
Linda M. Fetter	:	R-00943271C0015
Charlotte Rackley	:	R-00943271C0016
Robert & Susie Bell Jr., et al.	:	R-00943271C0017
Ethel Richardson	:	R-00943271C0018
Joel Guittard	:	R-00943271C0019
Irvin M. Shaffer	:	R-00943271C0020
Richard & Ana Marie Hartzell	:	R-00943271C0021
Michael L. Kitner	:	R-00943271C0022

Ruth C. Shields	:	R-00943271C0023
Eric Epstein	:	R-00943271C0024
Stephen Smith	:	R-00943271C0025
Patricia Fabisiak	:	R-00943271C0026
Mark J. Modderman	:	R-00943271C0027
J. Edward Wilson	:	R-00943271C0028
James Van Lenten	:	R-00943271C0029
Timothy J. Kokolus	:	R-00943271C0030
Robert J. Guerriere	:	R-00943271C0031
Charles M. Todaro	:	R-00943271C0032
Gerhard & Melanie Wendt	:	R-00943271C0033
Andrew A. Yost	:	R-00943271C0034
Bruce McIntosh	:	R-00943271C0035
Victor J. Moyer	:	R-00943271C0036
Paul Gatto	:	R-00943271C0037
Dorothy Louise Freyman	:	R-00943271C0038
Geraldine L. Miller	:	R-00943271C0039
Mr. & Mrs. William Hillanbrand	:	R-00943271C0040
Kermit L. Link	:	R-00943271C0041
W. Gilbert Co.	:	R-00943271C0042
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Agnes & Harry Baumer	:	R-00943271C0044
Diane McKinley	:	R-00943271C0045
Sierra Club	:	R-00943271C0046
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Charles E. Esterbrook	:	R-00943271C0055
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Susan W. Frey	:	R-00943271C0107
Diane Yeager	:	R-00943271C0108
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Laura Happ	:	R-00943271C0112
Helen M. Lewis	:	R-00943271C0113
Sandy Gaugler	:	R-00943271C0114
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R. T. Chmielewski	:	R-00943271C0119
Jolene Carey	:	R-00943271C0120
W. J. Nasseff	:	R-00943271C0121
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Mrs. Betty J. Hughes	:	R-00943271C0124
Commission on Economic Opportunity	:	R-00943271C0125
William Nemeth	:	R-00943271C0126
Robert C. Kleintop	:	R-00943271C0127
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Barbara McCrea	:	R-00943271C0129

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Terri Morrow	:	R-00943271C0139
Robin L. McComsey	:	R-00943271C0140
Michael Ochs	:	R-00943271C0141
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Axel Johnson Metals, Inc.	:	R-00943271C0145
M&M/Mars, Inc.	:	Intervenor
Bethlehem Steel Corporation	:	Intervenor
University/College Coalition	:	Intervenor
v.	:	
Pennsylvania Power & Light Co.	:	

RECOMMENDED DECISION

Before
Robert A. Christianson
Administrative Law Judge

July 28, 1995

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I. INTRODUCTION

On December 30, 1994, Pennsylvania Power & Light Company (PP&L or the Company) filed Supplement No. 50 to Tariff Electric-Pa. P.U.C. No. 200, to become effective February 28, 1995. This filing contains changes calculated to produce $261,635,000 in additional annual revenues, based on the projected level of operations for the 12 months ending September 30, 1995. This amount represents an average increase of approximately 11.7 percent of PP&L's annual retail base revenues.

The filing was suspended by operation of law until September 28, 1995. By order adopted January 26, 1995 and entered January 27, 1995, the Commission instituted an investigation to the lawfulness, justness and reasonableness of the proposed rates, as well as the Company's present and existing rates. The matter was thereupon referred to the Office of Administrative Law Judge.

A prehearing conference concerning the matter was held in Harrisburg on March 7, 1995, before Administrative Law Judge Michael C. Schnierle. However, before hearings were held the case was reassigned to me. A litigation scheduled was established at the prehearing conference and approximately 16 days of evidentiary hearings were held at the North Office Building in Harrisburg. In addition, public input hearings were held in Harrisburg, Lancaster, Williamsport, Scranton, Wilkes-Barre, Hazleton, Pottsville, Allentown and Bethlehem, for the purpose of receiving testimony from the public.

A total of 145 formal complaints were submitted by various parties, in response to the Company's general rate increase filing. Three petitions to intervene were granted. In addition, the Commission's Office of Trial Staff (OTS) participated actively in the proceeding. The various associated complaints are consolidated with the underlying Commission proceeding, for purpose of hearing and decision.

Main briefs were filed on or about June 16, 1995. Briefs were filed by OTS, PP&L, the Office of Consumer Advocate (OCA), the Office of Small Business Advocate (OSBA), the PP&L Industrial Customer Alliance (PPLICA), the Department of Defense and the Federal Executive Agencies (DOD), Bethlehem Steel Corporation (Beth Steel), the Central Eastern Pennsylvania Fuel Oil Dealers (CEPFOD), the Crown American Realty Trust (Crown), the University/College Coalition (UCC), the Commission on Economic Opportunity (CEO), the Sierra Club, and Eric Epstein (Epstein). I have received a PP&L motion, dated July 3, 1995, to strike portions of Mr. Epstein's main brief. I have also received an OTS motion, dated July 3, 1995, to strike portions of the reply brief of Sierra Club.

The record in this proceeding was closed, subject to certain provisions, at the last hearing, held on May 26, 1995. Before then, PP&L had submitted a request for transcript corrections, dated April 24, 1995. PP&L has also submitted another such request, dated June 13, 1995. No opposition to them has been indicated. Both requests are hereby granted. In addition, PP&L, by letter dated June 7, 1995, requests that a portion of OCA

witness Kahal's testimony in another proceeding be made part of this proceeding. Specifics are given in the PP&L letter. The Kahal testimony relates to cross-examination by PP&L of Mr. Kahal late in this proceeding. As it happens, the reference is to another proceeding where I presided. I have received no indications of opposition to this PP&L request and I now accept what PP&L has designated PP&L Cross-Examination Exhibit No. 1 as part of the record. I have provided a copy to the main file and the parties have been served with the PP&L request which contains the passage in question. This exhibit relates generally to avoided cost calculations. This other proceeding involves Pennsylvania Electric Company and carries the lead docket number of P-870235.

Several of the parties provide useful summaries of their positions or background information concerning the proceeding generally. In addition, various tables of contents provide useful outlines of the issues. I will proceed to refer to some of the passages of some of the briefs in an attempt to provide an overview of the major issues relating to this proceeding.

DOD, for instance, provides ten recommendations of its witness at page 30 of its main brief. OCA, at page 3 of its reply brief, refers to page 5 of the PPLICA brief which, in turn, provides various values for adjustments offered by that party. PPLICA, at page 45 of its main brief, also provides basic information about several major issues. PPLICA refers to a change in return on common equity from 13 percent to 11.5 percent. This would have a revenue impact of approximately $57 million, based on

an investment of approximately $5 billion. PPLICA provides the impact of a 10.85 percent equity rate as $85 million. PPLICA and OCA list impacts of $45 million relating to fossil fuel plant decommissioning costs, $19 million related to fossil fuel plant depreciation, $30 million related to a change in depreciation methodology for the Susquehanna Steam Electric Station and an automatic $35 million per year rate increase to reflect the possible return of expired off-system sales. PPLICA lists additional items at page 45 of its main brief. OCA, at page 3 of its reply brief, adds $62 million to reflect the return on equity associated with Susquehanna 2. Susquehanna 2 is the second nuclear unit of the Susquehanna Steam Electric Station.

The various parties, of course, take various positions on the issues. OCA, at page 7 of its main brief, takes the position that PP&L should decrease its rates by $66 million. OTS suggests a $20 million increase. OTS main brief, page 7. Of course, all of these numbers are approximate and various modifications, such as tax or capital structure changes, can produce varied results. However, these numbers give some feeling for the order of magnitude of the issues involved in this proceeding. The following passage from page 31 of the PPLICA main brief also provides interesting background information:

> PPLICA has recommended that PP&L be allowed a return on common equity of 10.85%. This reduces the Company's requested revenue requirement ($261.635 million) by approximately $85 million. In addition, PPLICA Witness Baudino's recommendation to utilize the September 30, 1994, actual capital structure (rather than the Company's use of a

> proposed capital structure which considers a projected $100 million equity issuance to which the Company is unwilling to currently commit) further reduces the Company's requested revenue requirement by approximately $5 million.
>
> Consistent with PPLICA Witness Baron's identification of an error in the Company's computation of its deficiency, the Company's requested $261 million increase should first be reduced by $21.790 million (to $239.845 million) to correct for PP&L's inclusion of its JCP&L capacity proposal and its offsetting ECR credit. PPLICA also recommends that various other revenue requirement adjustments (as outlined, infra.) be effected to result in an additional reduction to PP&L's proposed increase of approximately $126 million.
>
> In summary, PP&L's requested $240 million increase (as adjusted regarding the ECR issues), must be reduced from $240 million to no more than $24 million, consistent with PPLICA's recommended 10.85% return on common equity, the use of a historic capital structure, and the other revenue requirement adjustments identified by PPLICA Witnesses Kollen and Baron discussed infra.

The PPLICA reference to an ECR credit is a reference to a system whereby fuel costs are passed through to the customer and are adjusted automatically. The ECR system is frequently viewed as a matter which operates independently of base rate cases. However, there are interactions between the ECR mechanism and base rates, as determined in general rate increase proceedings. See PPLICA reply brief, page 30 for more discussion of this ECR matter.

PP&L, at pages 8-10 of its main brief, provides a description of itself. I rely mainly on this description for the following information.

The Company was founded back in 1920, through the consolidation of eight smaller electric companies. Just this year, PP&L received permission to form a holding company structure which has been placed into effect. The new company, PP&L Resources, Inc., is the parent of PP&L.

PP&L serves a territory of approximately 10,000 square miles, encompassing 29 counties in central-eastern Pennsylvania. It serves approximately 1.2 million customers within this service territory. In addition, it provides electric service to 16 Pennsylvania boroughs and to the Luzerne Electric Division of UGI Corporation. These wholesale services are subject to the regulatory jurisdiction of the Federal Energy Regulatory Commission (FERC).

PP&L owns and operates two nuclear units (Susquehanna 1 and Susquehanna 2), five fossil-fueled steam stations and two hydroelectric generating stations, as well as a number of combustion turbine and diesel units located throughout its system. In addition, PP&L is entitled to part of the output of various generating stations. Its total owned and leased generation resources, as of September 30, 1994, were 8,543 megawatts. Its system also includes transmission facilities with more than 1,100 miles of transmission lines operating at 230,000 volts or higher plus more than 50,000 miles of distribution lines operating at less than 230,000 volts.

PP&L operates its generation and transmission facilities as part of the Pennsylvania-New Jersey-Maryland (PJM)

interconnection. The PJM interconnection consists of PP&L and other electric utility systems in the states of Pennsylvania, New Jersey, Maryland, Delaware and Virginia and the District of Columbia. The PJM companies coordinate the operation of their generating systems and bulk power transmission systems, in the interest of economy. PJM operations are governed by a rate schedule which is subject to the jurisdiction of the FERC.

II. THE PUBLIC INPUT HEARINGS

Various parties refer to the testimony provided at the 11 public input hearings which were held between March 30 and April 6, 1995. These hearings were held at nine cities, with two hearings being held at Lancaster and at Harrisburg.

OTS, in the context of its arguments concerning street lighting, refers to testimony provided at Scranton, Wilkes-Barre and Hazleton. See OTS main brief, page 146. PP&L, starting at page 296 of its main brief, provides a brief response and review relating to these public input hearings. OCA, commencing at page 297 of its main brief, provides various references to public input testimony relating to a residential heating rate, rate RTS. In addition, OCA, with its reply brief, provides a 37 page summary of public input testimony.

Most notable was testimony provided by residential customers concerning the residential heating rate, rate RTS, and testimony from industrial customers concerning an interruptible industrial rate. Of course, various other customers provided testimony about their own problems or viewpoints.

The first witness at the first public input hearing was Arthur Taylor, president of Muhlenberg College. Seven witnesses testified at this first hearing, which was held in Harrisburg during the afternoon of March 30, 1995 at the Pennsylvania State Museum. An evening hearing was held that day, at the same location, the Pennsylvania State Museum. Only three witnesses testified at this evening hearing. Similar hearings were held in

Lancaster on March 31, 1995, afternoon and evening, at the Southern Market Center. Sixteen witnesses testified at this afternoon hearing while four witnesses testified at the evening hearing. One witness, Daniel C. Witmer, also testified at a subsequent Harrisburg hearing. See Tr. page 1074.

A fifth public input hearing was held at Williamsport, in the First Ward Fire Hall, during the evening of April 3, 1995. Eighteen witnesses testified at this hearing. The next hearing was held at Scranton during the afternoon of April 4, 1995, in the Municipal Building. Eleven witnesses testified at this hearing. That evening, a hearing was held in Wilkes-Barre at the Coughlin High School Auditorium. Eleven witnesses testified at this hearing.

On April 5, 1995, an afternoon hearing was held in the Hazleton City Hall and an evening hearing was held in Pottsville, at the Schuylkill County Courthouse. Thirteen witnesses testified at Hazleton while ten witnesses testified at Pottsville. The last two hearings were held on April 6, 1995, in the afternoon at the Bethlehem Town Hall and in the evening at the Allentown City Hall. These two sessions were probably the longest public input hearings for this proceeding, with 28 witnesses testifying at Bethlehem and 31 witnesses testifying at Allentown. Two state senators, Joseph Uliana and Roy C. Afflerbach, participated at the Bethlehem hearing.

The transcripts of the public input hearings include more than 800 numbered pages. Not all of this is testimony because the

presiding officer and various lawyers also offered comments on the record. However, considerable testimony was provided. The OCA summary can be consulted for details and, of course, the transcripts are available, as they are for the so-called "expert" testimony offered in the North Office Building at Harrisburg.

III. RATE BASE

Several items which fall under this heading were addressed. One of the items, relating to a so-called "excess capacity" adjustment is addressed by OCA under that title, III. Excess Capacity. PP&L and OTS address this matter under the general heading of rate base. Other parties have addressed matters associated with this fundamental issue but the most significant adjustments were offered by OTS and OCA. I will proceed to address the various rate base issues raised, with particular emphasis on the briefs of OTS and OCA.

A. Excess Capacity

OCA, OTS and PP&L discuss this subject in detail. The OCA discussion commences at page 11 of its main brief while the OTS discussion commences at page 26 of its main brief. The PP&L discussion commences at main brief page 15. These parties also discuss the matter in their reply briefs. OCA discusses this issue as both a matter of physical excess capacity (actual need for the power) and economic excess capacity (relating more to cost of the power).

OCA points out that a return on the equity associated with Susquehanna 2 was denied in the last PP&L general rate increase proceeding, approximately 10 years ago. It presents the matter as involving two fundamental questions, whether the capacity from Susquehanna 2 is needed in order for PP&L to provide reliable service to its ratepayers (physical excess capacity) and whether Susquehanna 2 will provide an economic benefit to PP&L's ratepayers

within a reasonable time (relating to economic excess capacity). OCA refers to Section 1323 of the Public Utility Code, 66 Pa. C.S. §1323, which OCA submits applies to this claim for a return on investment. OCA also argues that, even if Section 1323 does not apply, precedent relating to the "used and useful" concept should serve to preclude a return on this investment.

OCA argues that PP&L has physical and economic excess capacity related to Susquehanna 2. It asserts that PP&L continues to have physical excess capacity in the order of 400 to 800 megawatts. It further argues that Susquehanna 2 does not provide economic benefits, in excess of its revenue requirement cost to ratepayers. It projects this situation over the next 10 years. It would continue the equity return disallowance on Susquehanna 2. It gives the corresponding revenue adjustment as $62 million, excluding revenue taxes, on a Pennsylvania jurisdictional basis.

OCA proceeds to outline precedent relating to the "used and useful" concept. It offers various court precedents. In doing so, it points out that even a prudent investment may be excluded from rates if it is not currently "used and useful" in serving the public. OCA also refers to various adjustments which are appropriate in these circumstances. It refers to Section 1315 of the Public Utility Code and to Commission decisions handed down before 1986. OCA next proceeds to refer to Section 1323 of the Public Utility Code. It refers to the various tests associated with Section 1323. In presenting its arguments, it also refers to various cases handed down under Section 1323.

OCA argues that Section 1323 applies because PP&L has not previously received ratemaking recognition of the equity return associated with Susquehanna 2. It mentions that Section 1323 was enacted in 1986, subsequent to the last PP&L base rate case where the Susquehanna 2 equity return was denied. It argues that this claim is now made for the first time under the provisions of Section 1323. Its fundamental reasoning is that a previous denial in the last base case for PP&L does not count, for purposes of Section 1323. It refers to a West Penn decision for support. See main brief, pages 22-23.

OCA continues with other references to precedent. It also states that legislative history confirms its view concerning applicability of Section 1323. OCA further argues, commencing at page 28, that its result should obtain even if Section 1323 is found to not apply to this situation. It quotes language indicating that there is a dual test relating to two alternatives. The first alternative would be that the company show that the plant provides net economic benefits which have begun to outweigh net costs. The other alternative would be to show that the capacity is no longer excess, relative to system reliability. If either test is passed, the Company may take appropriate steps to seek modification of any exclusion of investment from rate base. OCA again refers to the "used and useful" concept as well as to the two tests. OCA would be happy to continue the exclusion of the last case, 10 years ago. It then turns, at page 30, to the matter of physical excess capacity.

OCA states that it has demonstrated that, based on a reasonable reserve margin of approximately 12 percent to 15 percent, which is consistent with the PP&L PJM interchange obligation, between 400 and 800 megawatts of generating capacity is not needed for system reliability purposes in the test year or the year following the test year. For OCA, this constitutes physical excess capacity. It then responds to two PP&L arguments, relating to a reserve margin and inclusion of 500 megawatts of qualifying facility (QF or NUG) resources on the PP&L system. OCA argues for its reserve margin of 12 to 15 percent based on a fundamental 12 percent PJM requirement. It further argues that PP&L estimates of reserve margin requirements are rather vague.

OCA would not support adoption of a 22 percent reserve margin associated with the last PP&L general rate increase proceeding. It refers to the "lumpiness" argument that capacity should not be brought on in small increments but must often be brought on in large amounts, all at once. The OCA view is that the "lumpiness" problem is adequately accounted for in the three percent cushion above the PJM 12 percent requirement. It continues with arguments tying PP&L capacity needs closely with the PJM requirements and benefits. It asserts that it provides for a cushion of about 200 megawatts to account for uncertainties that arise in planning and operating. This corresponds to the three percentage points allowed above the PJM 12 percent requirement.

OCA then turns to a detailed version of its argument that NUG capacity should be included in determining PP&L's installed and

available capacity resources. This amounts to approximately 500 megawatts of capacity. It asserts that NUG capacity is recognized by both PJM and PP&L, for planning purposes. It also points out that ratepayers are paying the full cost of these purchases, through the ECR. It argues against the PP&L position that NUG capacity should not be counted, because PP&L is compelled to purchase this power pursuant to federal law. It refers to Subsection 1323(c). This subsection provides what OCA characterizes as an eight year window during which NUG capacity is not considered. It views this situation as falling beyond the eight year window relating to Susquehanna 2. OCA further argues that PP&L has had ample opportunity to adjust its capacity resource profile through various steps it could have taken. In closing, it refers to the fundamental "used and useful" requirement.

The final OCA "physical excess capacity" analysis produces an excess capacity of between 400 and 800 megawatts. This utilizes PP&L's own determination of its resources, including the NUG capacity. This is also based on the reserve margin of 12 percent to 15 percent. OCA admits that this is somewhat less than the 850 megawatts of Susquehanna 2 which serves native load customers. It then refers to its economic excess capacity analysis and asserts that the equity return disallowance on the Pennsylvania jurisdictional share of the Susquehanna 2 plant should be continued.

The argument relating to economic excess capacity commences at page 46 of the OCA main brief. OCA asserts that the

economic excess capacity problem at Susquehanna 2 is more compelling today than it was 10 years ago. OCA refers to possible cost savings but points out that these savings are not reflected in PP&L's request in this case. It refers to Section 1323 and a rebuttable presumption that a unit shall be determined to be excess unless, if it is a baseload unit, it is found to produce annual economic benefits which would exceed a total annual cost of the plant during the test year and within a reasonable period following the test year. It points out that this is not a lifecycle analysis but a short-term analysis. It also refers to emerging competition in the generation market.

OCA argues that the developing market for generation provides a means to now directly measure the economic benefits of capacity such as Susquehanna 2. It refers to PP&L arguments. It asserts that analysis based on economic excess capacity is established precedent. It further asserts that its adjustment is not a "prejudging" of the stranded cost issue and does not impose market prices on PP&L. It submits that use of market information is reasonable, under the circumstances.

OCA points out that its witness first estimated the cost to ratepayers of Susquehanna 2 power, assuming no disallowances. He then assessed the probable market cost of base load power over a five to 10 year period. Finally, he recomputed the cost of power, assuming the continuation of the Commission's equity return disallowance. OCA produces a reasonable range of probable market costs at 2.5 cents per kilowatt hour to 5.0 cents per kilowatt

hour. It compares to this the 6.0 cents per kilowatt hour cost of Susquehanna. The conclusion is that Susquehanna 2 does not produce net economic benefits to ratepayers, within a reasonable timeframe. It continues by reference to a PP&L study. It does not advocate use of this study but asserts that it do supports the necessity of a capacity disallowance.

OCA refers to the rebuttal case of PP&L on this topic. Reference is made to a "coal proxy" analysis. The comparison was to a new coal plant, showing a 10 percent cost advantage for Susquehanna 2. OCA argues that this is not a meaningful analysis. It indicates that replacement of Susquehanna 2 would not be by a base load facility but by a combined cycle facility. It also refers to a comparison to a coal plant of 1985 vintage.

The closing OCA argument is that the disallowance of Susquehanna 2 established in the last case should be continued. It views this as a fair sharing of the costs of the excess between ratepayers and shareholders. It refers to risk sharing. It refers to the last PP&L general rate increase decision and review of that decision. OCA also points out that any final disallowance must be consistent with the Commission's rulings on equity return, rate base and jurisdictional allocation percentage. It finds benefits in its result. It views this result as imposing a 50/50 sharing of cost.

The OCA reply brief argument on this topic commences at page 7 of that brief. It first refers to PP&L arguments relating to fundamental policy considerations. It further asserts that

there are very few factual disputes in this case regarding excess capacity. It then refers to the "used and useful" standard. At pages 7 and 8, it outlines the fundamental factual basis for its arguments. It again argues that Section 1323 applies to this situation. It then reviews its physical excess capacity and economic excess capacity arguments. It responds to the PP&L position that the 500 megawatts of NUG capacity constitutes any excess capacity involved. It also refers to arguments relating to Section 523 of the Public Utility Code.

At page 17, OCA points out that excess capacity could just as easily have resulted from a loss of load due to an economic downturn or to some other event beyond PP&L's control. It also argues, at page 18, that there is nothing in the relevant federal statute which requires a utility to purchase capacity which is unneeded or overpriced, at the time that a contract is entered into. It indicates a view that PP&L has the burden of establishing that conditions have changed from a disallowance of 10 years ago.

OCA again refers to its reserve margin analysis and arguments. It repeats its conclusions concerning overcapacity. It agrees that its range of 400 megawatts to 800 megawatts is less than the 850 megawatts associated with Susquehanna 2 but submits that the entire disallowance should continue, essentially because of the economic excess capacity analysis.

OCA then turns to the economic excess capacity analysis. It reviews PP&L arguments relating to market data. OCA would apply Section 1323 and would not use a lifecycle analysis. Moreover, it

views use of current information as appropriate. OCA also reviews, again, the PP&L analysis presented on rebuttal. One key to the argument between OCA and PP&L is the choice of the alternative production source. OCA again concludes that Susquehanna would cost 6 cents per kilowatt hour while the market cost is between 3 cents and 4 cents per kilowatt hour.

OTS commences its argument on this subject at page 26 of its main brief. OTS does not address this matter explicitly in its reply brief. It defines excess capacity as capacity needed over and above what is necessary to meet peak demand plus that capacity to ensure that there is a margin to allow for day-to-day variations in the operating condition of installed generation. It offers the adjustment that PP&L be denied the entire return on a slice of its system, that is a fraction of all generating capacity, not merely referring to Susquehanna 2. Not all of the OTS numbers are entirely clear in its discussion but the slice would be 564 megawatts. See OTS main brief, page 35; OTS Statement No. 5 (of Mr. Metro), at page 23.

OTS starts with PP&L capacity and analyzes such matters as interruptible load and outages. It would include NUG resources. It refers to the reserve margin of 12 percent but also to the 22 percent possibility, as a maximum. Its witness arrived at a particular number for the reserve margin, based on the PJM requirement and an additional forced outage factor. Its final number is a 16 percent reserve margin requirement, similar to the upper limit of OCA. It would consider resources above the

16 percent reserve margin as excess generating capacity. As stated, OTS would include NUG capacity, for various reasons.

OTS refers to the most recent base rate proceeding for PP&L. Actually, reference should be to the most recent proceeding (relating to Susquehanna 2) and to the previous proceeding (relating to Susquehanna 1). It also explains how it arrived at its excess generating capacity figure. It uses a nine year average. In its discussion, OTS also mentions that it does not oppose PP&L's ECR proposal. The bottom line of the OTS analysis is a reduction of rate base by approximately $239 million, associated with net plant in service related to 564 megawatts of excess capacity.

The PP&L excess capacity discussion starts at page 15 of its main brief, under the heading Usefulness Of PP&L's Generating Capacity. It refers to the OCA physical capacity and economic capacity analysis. It then provides what it views as background. Background includes a reference to the Susquehanna 2 proceeding which closed in 1985. There was then a 22 percent reserve margin employed for the analysis. The reference includes reference to a fair sharing of the risk and reward between customer and shareholder. It also characterizes the operation of the Susquehanna plants as good. It notes that demand for power from PP&L has increased. PP&L then complains that OTS and OCA have rewritten the rules of the game in order to produce an adjustment in this proceeding. It criticizes the reserve margin used of 15 to 16 percent, the inclusion of NUG capacity, the ignoring of certain

measures taken relating to efficiency and use of the market-based economic benefits analysis.

PP&L refers to various problems associated with recent outages, indicating that reserve margins are not excessive. It mentions projected reserve margins of 16.4 percent and 14.2 percent. It then presents the analysis of the main PP&L witness concerning this topic. It observes that the disputes between the parties relate to capacity which should be included in an evaluation and to the definition of a proper reserve margin employed. One major topic, and difference, is use of the QF or NUG production in calculating the margins. It also mentions a proper reserve margin of between 12 and 20 percent.

PP&L turns to a discussion of the NUG capacity. It points out that these contracts were not executed until after Susquehanna 2 had been added to the system. It views the NUG capacity as unquestionably the cause of any excess capacity. It also points out that, in its view, PP&L did not need the NUG capacity for capacity purposes and that contracts were based on energy-only avoided cost. It further states that PP&L makes no capacity payments to the QFs. It also asserts that it has no control over the QF production. It characterizes the QF capacity as capacity which PP&L does not need or want, at least its argument implies this position.

PP&L also refers to use of Section 1323. It argues that Section 523 (concerning performance factors, including a provision relating to use of alternative sources of power) conflicts with the

OCA interpretation of Section 1323. It views the OCA position as penalizing PP&L for its efforts relating to utilization of QF capacity. It refers to the eight year window built into Section 1323 and argues that the appropriate focus of the inquiry should be on what the utility could have foreseen when it undertook its capacity expansion program. In making its argument, PP&L refers to a policy statement which had been proposed back in 1987. In closing this particular passage, it states that QF capacity should not be included in a determination of the PP&L reserve margin. If it is not included, PP&L argues, the excess capacity adjustments of OTS and OCA should be rejected.

PP&L then returns to a calculation of a reasonable reserve margin. It would base this on the particular utility system in question. The minimum is viewed as not disputed, which would be the 12 percent PJM requirement. It refers to such matters as high unit unavailability during winter months, when PP&L has a peak. It also refers to the "lumpiness" problem involving possible temporary capacity surpluses. It points out that the Susquehanna 2 lump would now be fully absorbed but for the QF capacity brought on the PP&L system subsequently. It also refers to 90 megawatts of capacity upgrades at Susquehanna 1 and Susquehanna 2. This was done for, essentially, efficiency purposes. It would set the reserve margin well in excess of 12 percent on reliability grounds, lumpiness, and other considerations. It also refers to use of 22 percent in the Susquehanna 2 proceeding 10 years ago. In

addition, it refers to similar margins employed in other proceedings.

PP&L provides criticism of the reserve margins calculated by OCA and OTS, essentially at 16 percent for OTS and 15 percent for OCA. It views the results as based on subjective judgment and as not including, or substantially discounting, non-reliability related factors. PP&L also refers to Mr. Metro's recommended 546 megawatt adjustment and observes that the figure is only 371 megawatts for the first year. It would reject the inherent notion in the OTS adjustment, based on a nine year period, that PP&L should be penalized for having excess capacity in the future. It observes that part of the OTS position is based on the PP&L request to recover returning JCP&L (Jersey Central Power & Light) fixed costs.

At page 46, PP&L turns to a review of an OCA economic analysis. It states that Mr. Metro properly recognized that economic excess capacity should not be an issue in this proceeding, because PP&L is not seeking to recover the cost of any new generating unit. It further observes that Mr. Kahal, and OCA, rely on Section 1323 and the economic analysis. It makes the obvious point that Susquehanna 2 is not truly new generating capacity. It refers to the eight year window inherent in Section 1323 and to other considerations. It then turns to the actual test developed by Mr. Kahal for OCA. It criticizes the use of market or deregulated power numbers. It states that the flaws in Mr. Kahal's test are numerous and profound. It provides details.

Among other things, PP&L refers to the testimony of Mr. Kahal approximately three years ago, in a NUG case involving Penelec. See PP&L main brief, page 54. PP&L also refers to the testimony of its witness, Dr. Hieronymus, who provided rebuttal testimony. His testimony was based on the alternative of a new coal plant, consisting of two years with a combined capacity of 990 megawatts. In summary, PP&L argues that PP&L now needs Susquehanna 2 to meet its customers demands and to maintain a reasonable reserve margin. It also argues that Susquehanna 2 produces annual benefits to the system. It would reject the excess capacity adjustments proposed by OTS and OCA.

PP&L continues its "usefulness" argument at page 3 of its reply brief. It first mentions two themes it finds in the OTS and OCA arguments, that an adjustment is a logical continuation of action taken in the last base rate proceeding and that customers would be penalized if Susquehanna 2 were fully allowed into rates. It reviews the adjustment made in the last case. It compares this to the adjustments proposed here. It also produces information about prices and trends. It discusses the matter of reference to the QF or NUG output.

PP&L again refers to Section 523 which tends to encourage utilities to use NUG production. It would not use the NUG output to disallow a return on preexisting capacity. PP&L also refers to a reserve margin calculation. PP&L addresses Mr. Kahal's calculations and criticizes, among other things, his use of certain information sources. PP&L views the OCA use of market comparisons

as fundamentally unfair. It indicates that the comparison would be out of context. It views the differences between the OCA position and the PP&L position as broad and significant. In its argument, PP&L indicates the view that OCA has misused various source documents.

I commence my review of this matter with a reference to the last PP&L base rate proceeding, the Susquehanna 2 proceeding, 10 years ago. I do this partly because I find some of the arguments presented to be a bit confusing. I will also refer to Section 1323 and my view of the role of this section.

In the last PP&L proceeding, reported at 59 Pa. P.U.C. 332 (1985), the Commission considered the "slice of system" approach which had been used in the previous PP&L proceeding, the Susquehanna 1 proceeding. I myself, as presiding officer, employed that approach. However, the Commission chose to deny the common equity return on Susquehanna 2. It reasoned that disallowance of a total return would, under the existing context, amount to a penalty. It pointed out that dividends on preferred stock and interest on debt must be paid in any case. Some of this reasoning is reflected in passages included in Section 1323. In the last proceeding, the Susquehanna 2 proceeding, the Commission first determined that PP&L had a 945 megawatt excess capacity amount. It then proceeded to fashion a suitable adjustment, in the sense of providing a remedy.

In this proceeding, we are again faced with the question of allowing Susquehanna 2 totally in rate base. OTS has produced

an excess capacity number of roughly half of the Susquehanna capacity. OCA has produced a range which runs from roughly half of the Susquehanna 2 capacity to slightly less than the total capacity of Susquehanna 2. OCA then relies on its economic analysis as a basis for its adjustment, which would continue the elimination of equity return on Susquehanna 2. To some degree, the OCA analysis seems to be based on an argument that continuation of the existing exclusion would be appropriate, largely based on mere continuation of the existing status.

My view is that the situation has somewhat changed from what it was 10 years ago and that we should not merely repeat the disallowance of the last case. I realize that OCA is basing its adjustment on more than merely repetition of the last case but the changes are significant, for purposes of my conclusion. The most important circumstance is the fact that more recent QF (or NUG) capacity plays an important role here. For this reason, I would be very reluctant to support an adjustment related entirely to Susquehanna 2. I prefer the approach I suggested in the last case, a "slice of system" approach, whereby all capacity is considered in making the adjustment. This seems to be allowed for in some of the language included in Section 1323. However, I do not agree with OCA that Section 1323 applies here.

I recognize that OCA can provide some basis for use here of Section 1323. However, my reading is that PP&L is not claiming the cost of Susquehanna 2 for the first time in this proceeding. It is not even receiving recognition of Susquehanna 2 for the first

time in this proceeding. It received partial recognition in the last case. Moreover, some of the details of Section 1323 really do not work when we are dealing with a timeframe 10 years after the completion of the plant.

I go back to the fundamental "used and useful" concept. PP&L makes various policy and other arguments for the proposition that it should not be penalized for taking on QF capacity or be otherwise penalized for any possible overcapacity apparent in its system. PP&L has some good policy arguments but the "used and useful" concept is a rather simple one.

I am not now deciding that no counter-argument would prevail against the "used and useful" basis for disallowance. However, I find no good reason to allow PP&L a return on capacity which is not deemed to be "used and useful", based on the classic test. That test is, essentially, a physical excess capacity test. I understand that the economic capacity test is also used. This test can be manipulated much as some manipulations occur with rate of return and other rather complicated calculations. We have to decide what comparisons are appropriate and then make calculations, based on some uncertainty inherent in the whole system of analysis.

This is why the "used and useful" test has been used. We do not go even to such matters as reasonableness of the company decision at the time the capacity in question was planned or put into place. In addition, the strict "used and useful" approach would not give recognition to bad luck on the part of the utility

or, in this instance, any possible compulsion associated with the taking on of NUG capacity by the utility.

This approach also indicates that a plant-specific approach should not be taken as a remedy. Rather, my fundamental view is that the overcapacity in question is produced by the entire PP&L system, not by simply Susquehanna 2. Moreover, as a remedy, the whole system should be considered. As I suggested in the case 10 years ago, there is some reason to eliminate the oldest plant, in an overcapacity situation, absent economic or other considerations. The thought would be that the oldest plant would be the candidate for retirement, being nearest its life end. However, I think that the approach inherent in the "slice of system" calculation is the best. In this instance, any existing overcapacity is based on the entire history of PP&L's choices and experiences. Susquehanna 2 should be no more singled out than should be the NUG capacity or any other capacity on the system.

I add the observation that, having essentially dismissed or diminished the impact of the economic analysis, I do not have a physical excess capacity analysis which produces an adjustment equal to the capacity of Susquehanna 2. The upper end of the OCA analysis comes close but this is based on a 12 percent PJM allowance and, apparently, no more. I would move the allowed margin somewhat higher. In the last case the number was 22. In this case I accept the OTS number of 16. However, in my view, neither the OTS analysis nor the OCA analysis produces an overcapacity number which allows for disallowance of Susquehanna 2

entirely. Rather, I accept the smaller OTS number of 564 megawatts. In fact, given a choice, I accept the OTS analysis, rather than the OCA analysis. I fundamentally agree with the OTS approach and accept the result indicated.

I can agree with the PP&L argument that the Susquehanna plants have an operating well and that they even provide a benefit to the system. I do not have to reach this matter, however, because I am using the fundamental "used and useful" approach whereby good performance and proper company planning are essentially irrelevant. Rather, the "used and useful" approach acts like a market approach, in practice, because it eliminates the return on investment only because the investment is excessive, not because of any fault on the part of the utility. In that sense, it is like the market in applying discipline even though the company has been efficient and prudent.

Both the OTS and OCA approaches, on a physical excess capacity basis, indicate approximately the same disallowance as appropriate. Rather than producing alternative calculation which would result in approximately the same disallowance, I am accepting the OTS approach and its calculations. I am not entirely sure about the nine year period but I accept the result, based partly on the recognition that some of the capacity coming back to the system is associated with the Susquehanna plant.

To summarize, I agree with the use of a "used and useful" adjustment here, based on the physical excess capacity analysis. I am in fundamental agreement with the results produced by both OCA

and OTS, although I would not go to the higher end of the OCA range. I also accept the OTS result, based on a disallowance of approximately $239 million of rate base.

B. Accrued Pensions

The OCA discussions of this topic are found commencing at page 65 of its main brief and page 39 of its reply brief. The corresponding PP&L discussions commence at page 71 of its main brief and page 21 of its reply brief. OCA witness Catlin had proposed a $74 million rate base adjustment, representing the difference between pension costs that the Company recorded on its books as an expense and the Company's cash contributions to its pension plan. This topic relates to financial reporting standards associated with Statement of Financial Accounting Standard No. 87 (SFAS-87).

OCA sets up the basic adjustment it offers. It submits that the balance of the accrued pension liability should be deducted from rate base. It then refers to PP&L's response on rebuttal. It provides the further response of its own witness. OCA states that in the last PP&L rate case, there was a pension expense allowance. It points out that this amount exceeds the Company's pension expense per books in every year, with a reference to SFAS-87. OCA refers to the Company argument that it is inappropriate to single out this one matter for analysis. It reviews the same two company arguments in its reply brief. It refers to its responses on surrebuttal. Its final point is that this adjustment, which recognizes that these funds have been

recovered from ratepayers but not contributed to the pension fund, is appropriate and should be adopted.

PP&L, in its main brief, sets the matter up, as does OCA, as being based on the SFAS-87 accounting standards. The fundamental argument is that the Company has received customer supplied funds which it can use in its operations. It goes on to point out what it views as various flaws in the OCA position. PP&L first points out that accounting entries are not the same as cash actually recovered through rates. It also asserts that accrued pension liability represents an amount by which the PP&L pension plan is underfunded on an actuarial basis, not overfunded. It characterizes the adjustment as being based on what the Company, in effect, owes to the pension fund. It goes on to suggest that OCA has changed the focus of its adjustment during litigation. It views some of the OCA positions as involving an improper interference with a previous rate determination.

PP&L covers the same ground in its reply brief. PP&L adds the argument that the OCA position is unfair and inequitable because it focuses on a change in one element of PP&L's benefits expense without considering other components of expense. It points out that the presumption of reasonableness of rates refers to the utility's total revenues and total expenses. The implication is that increases in expenses for some areas might offset decreases in expenses for other areas. It would not go through a line by line examination of various elements in the ratemaking analysis.

I admit to some difficulty in merely understanding the OCA argument in this instance. However, my result is governed by fundamental agreement with the PP&L point that we should not engage in a line-by-line examination of revenues and expenses associated with the last rate proceeding. Rates are set as a general matter, based on many individual elements. The revenue requirement should be examined as a whole or not examined at all. OCA does seem to be suggesting an adjustment clause, similar to the ECR. That is not the system which has been provided. I agree with PP&L and do not accept the OCA adjustment in this instance.

C. Cash Working Capital

The fundamental OCA argument commences at page 67 of its main brief. OCA first explains the fundamentals of cash working capital calculations. For large companies, the cash working capital analysis is normally based on a lead/lag study. OCA then proceeds to outline its presentation concerning this topic. It points out what it views as errors in the Company's calculations and outlines adjustments. It arrives at a negative cash working capital. It would resist the Company argument that a negative cash working capital should be set at zero.

One of the main arguments referred to is the position that there should be a deduction of the accumulated debt interest and preferred stock dividends from cash working capital, because the funds are available for unrestricted use by the Company. OCA goes on to discuss this basic doctrine.

OCA offers additional adjustments, which it discusses in some detail. The OCA proposed cash working capital requirement for PP&L is negative $9,857,000, with a Pennsylvania jurisdictional negative $12,444,000. It requests a corresponding Commission adjustment, based on the Commission's own findings.

OCA again addresses cash working capital in its reply brief, starting at page 32. It refers to the Company argument that cash working capital should not be a problem because it is making no claim for cash working capital in this proceeding, having set the claim at zero. It points out that the Company arrived at its result by offsetting the positive balance of prepayments by the negative result obtained from the lead/lag study. It provides various numbers associated with this argument. It ties together the arguments relating to balance of prepayments and the lead/lag study. It includes reference to its "prepayments" argument commencing at page 82 of its main brief.

The associated adjustments were to eliminate the balance of prepaid insurance and to adjust the balance of other prepayments to exclude the effects of a one day prepayment of interest and preferred dividends. The matter is discussed in the main brief and again reviewed in the reply brief. OCA then discusses the PP&L argument that the Commission should not drive the cash working capital figure into negative numbers. Within this context, it discusses the deduction of accumulated debt interest and preferred stock fund dividends. OCA also discusses permit fees, interest on customer deposits and the balance of prepayments.

OTS discusses cash working capital in its main brief, commencing at page 15, and in its reply brief, commencing at page 2. It observes that the original PP&L claim was negative. It goes on to its recommendation that two adjustments be made. It provides additional details. At page 21, OTS mentions the rebuttal position of PP&L that no allowance for cash working capital be provided here. This was after the negative cash working capital positions have been taken by the other parties. OTS points out that the original Company claim was for a negative number. OTS elaborates somewhat on its basic argument but its bottom line is that the actual calculation of cash working capital should be used, whether positive or negative.

OTS provides a brief discussion of cash working capital, commencing at page 2 of its reply brief. Its argument is essentially limited to the "negative cash working capital" problem. Its fundamental point is that the Commission can allow, and has allowed, negative cash working capital.

The fundamental PP&L cash working capital argument commences at page 62 of its main brief. It asserts that it made no claim for cash working capital even though it produced a cash working capital, lead/lag, study. It reviews the adjustments proposed by OTS and OCA. One fundamental point it makes is that the "offset" for accrued interest and dividends is not a "stand-alone" component of a utility's rate base, because it cannot exist except in relation to a claim for a positive cash working capital allowance.

PP&L then reasons that this adjustment should not be used to reduce the utility's rate base below a zero cash working capital level. It points to precedent where the Commission has held the cash working capital to zero. PP&L also addresses various individual adjustments offered by the other two parties. PP&L provides additional arguments in its reply brief, commencing at page 16.

I accept the fundamental PP&L position that the interest/dividend offset should only be used against a positive cash working capital balance. This adjustment should not be used to drive cash working capital into negative numbers. Therefore, I am setting cash working capital at zero.

D. The Pension Expense

Commencing at page 23 of its main brief, OTS points out that there is a rate base impact of its pension expense disallowance. It states that there should be an adjustment to rate base if the expense adjustment is accepted. I find no response to this argument. However, I reject the rate base impact because I have rejected the OTS' pension expense adjustment in V. Expenses (D), infra.

E. Land Held for Future Use

PP&L has not included land held for future use in the rate base claim for this case. It has, instead, asked the Commission to approve the accruing of an allowance for funds used during construction (AFUDC) relating to future use property investments. OTS raises an objection to this request. It refers

to case law. OTS would deny the PP&L proposal or modify it to make sure that the prudency determination for the plant in question would occur during a future rate case, not now. The determination should be when the land is ready to come into rate base.

PP&L addresses this matter, starting at page 75 of its main brief and at page 23 of its reply brief. It states that it is only requesting an accounting order, to permit accrual of AFUDC equivalent amounts on its books. It states that it does not intend that this accounting approval will preclude examination of this issue in the future. It finds no good basis for the OTS opposition to this request. PP&L repeats its fundamental position in its reply brief and points to timing considerations. It would find no violation of the "used and useful" principle.

This accrual makes sense to me and I accept the fundamental PP&L position. I emphasize that I am approving only an accounting matter and that the ultimate decision concerning acceptance of the property in question into rate base will occur in the future, when PP&L asserts that the land is actually used and useful.

F. Other Rate Base Matters

The Company, within its measures of values/rate base discussion, addresses various other elements. In some instances, it states that there is no opposition while in other instances it indicates that it is merely following accepted practices. I find no basis for any adjustment concerning these matters of accrued depreciation, pollution control projects, fuel stocks and materials

and supplies, accumulated deferred taxes and customer advances and customer deposits.

IV. REVENUES

OCA includes one item under revenues, relating to economic development credits. It proposes a sharing between PP&L customers and shareholders of associated cost. PP&L addresses this matter within an associated discussion under its general heading of rate structure. I too will discuss the matter under that heading. DOD raises a matter of interest on consumer deposits, starting at page 11 of its main brief. It suggests a lower interest rate and observes that PP&L had agreed to an adjustment.

PP&L commences a short discussion of this topic at page 77 of its main brief. It mentions (1) the interest on deposits where it had agreed to and made an adjustment, (2) the OCA proposal that there be a one-half sharing of economic development initiative credits and (3) a proposal by CEPFOD (the oil dealers) that PP&L absorb certain revenue deficiencies associated with rate RTS. PP&L discusses the third topic within its related discussion under rate structure. Once again, I will follow the PP&L pattern and discuss this matter there.

PP&L shows the heading revenues at page 26 of its reply brief. It merely refers to the economic development credits and the rate RTS matter raised by CEPFOD. It addresses both matters within the rate structure section of its reply brief. Having followed the PP&L lead on the whereabouts of these discussions, I have nothing particular under revenues to discuss. I recommend no strictly revenue adjustments, having deferred those matters to discussions elsewhere.

V. EXPENSES

Several adjustments were presented under this heading, by OCA, by OTS, by PPLICA and by DOD. The first topic discussed by OCA relates to interest on customer deposits. It refers to a recent change of 11 percent down to 5.77 percent, in connection with a change to Commission regulations. OCA also touches on this point at page 44 of its reply brief. Also see my discussion under the heading of Revenues. There is no opposition to the change and really no contest concerning this matter. OCA also offers, at pages 94-95 of its main brief, a useful introduction to its expense adjustments. That introduction follows:

> The OCA has proposed a number of adjustments in this proceeding to the Company's expense claims based on the analysis and testimony of Thomas S. Catlin and Dr. Charles E. Johnson. The OCA submits that adjustments to the Company's claims for fossil fuel plant decommissioning costs, deferred SFAS 106 expenses, and Susquehanna early window deferral costs are necessary to comply with the Public Utility Code and case law.
>
> In addition, the OCA submits that adjustments to the Company's depreciation expense claim are necessary to reflect an appropriate test year level of expense. The OCA has made three adjustments to the Company's depreciation expense claim: (1) an adjustment related to the Company's change in depreciation methods for the Susquehanna plant; (2) an adjustment related to the Company's change in deactivation dates for certain fossil fueled plants; and (3) an adjustment related to the Company's proposal to amortize rather than depreciate certain general plant.
>
> Similarly, the Company's claims for expenses associated with employees' benefits, and the Voluntary Early Retirement Program should be adjusted to reflect savings

> associated with PP&L's employee reduction. Finally, certain of the Company's claims, such as the Susquehanna Refueling Outage Costs and the Company's SFAS 106, SFAS 87 and SFAS 112 claims must be adjusted to reflect a more representative level of expense. The OCA submits that its proposed adjustments are soundly based in the Public Utility Code, jurisprudence and generally accepted ratemaking principles.
>
> During the course of this proceeding, the parties have made a number of revisions to their positions, reflecting updated information or the adoption of other parties' positions. The OCA has reflected these changes in the revised exhibits appended to this brief as Appendix A.

Of the four major parties offering expense adjustments, there is considerable overlap on the issues. I will seek to coordinate this overlap and present only one discussion on each topic. PP&L has, of course, sought to do the same.

PP&L breaks down the expense topic into three main headings, as follows: A - Operating and Maintenance Expenses, B - Decommissioning/Dismantlement Costs and C - Depreciation Expense. Other parties follow similar patterns. For instance, OCA has a separate general heading for nuclear de-commissioning related issues. In addition, various other parties offered discussions which bear on expense issues raised by OCA, OTS, DOD and PPLICA. I will seek to integrate the various discussions within this general discussion of expenses. However, some discussions might be included elsewhere in this decision.

A. Reduction in Employees

OCA offers a reduction in expenses to reflect benefit savings associated with the reduction in employees which PP&L

projects (OCA Main Brief, page 96, Reply Brief, page 44). It observes that PP&L has not contested this adjustment. OCA submits that the adjustment should be adopted. I agree with OCA and find no Company response. I accept the adjustment to reduce expenses by $171,000 on a jurisdictional basis.

B. Early Retirement Program

PP&L explains its voluntary early retirement program, announced on September 25, 1994, commencing at page 79 of its main brief. Its initial filing included a reduction in operating expenses as a result of this program. The PP&L proposal was a net figure based on anticipated savings and anticipated costs. PP&L also describes the program, to some degree (Main Brief, page 80). It further states that DOD had raised the question but was not expected to press the matter, upon explanation by PP&L. I find no issue raised in the DOD main brief. PP&L also observes that PPLICA and OCA raise concerns about this matter.

OCA addresses this topic in its main brief, commencing at page 158. It explains that PP&L is proposing that it be allowed to defer and amortize costs associated with this program, with the five year amortization. Its witness proposed that the amount to be amortized be adjusted to net out the savings which PP&L will realize from the program, prior to the time when savings are reflected in rates, for an annual jurisdictional expense reduction of $5,019,000. OCA asserts that the Company proposal produces a mismatch between cost and benefit for the program. OCA also observes that the Company witness had indicated that this program

had not produced cost savings because of the need to supplement the workforce. OCA defends its adjustment as necessary and appropriate, in order to recognize that this program has produced cost savings which were not similarly reflected in rates.

OCA, in its reply brief, commencing at page 73, states that it has adopted the PPLICA adjustment to this claim, removing cost savings. It again states that PP&L should not be able to collect costs without reflecting associated savings. It outlines the Company response. It also indicates that there is limited data on the subject.

PPLICA commences a discussion of this matter at page 43 of its main brief. It states that PP&L has a request for recovery of approximately $76 million, over the five year amortization. It proposes two specific adjustments. It first proposes that the amortization cost be reduced by the amount of savings enjoyed before the end of the test year. As usually happens, the end of the test year is approximately the same as the end of litigation and the commencement of new rates. PPLICA also makes the obvious point that recovery of cost must be made on net cost, not gross cost.

The other PPLICA adjustment is to change the amortization period from five years to ten years, mainly because this parallels the length of time during which actual payment would be made under the retirement program. This adjustment, of course, reduces the annual revenue requirement associated with this amortization. PPLICA arrives at a total adjustment of $9.6 million annually.

PPLICA addresses the retirement program amortization period, commencing at page 30 of its reply brief. It argues that this is improper, because it would allow recovery quicker than payment. PPLICA states that it has proposed netting of cost and a 10 year amortization. It acknowledges that PP&L has opposed these two adjustments. It reviews the state of the record and argues that PP&L has not substantiated its argument that savings had not been generated. PPLICA asserts that the PP&L argument misses the point, that these expenses are paid out and incurred over a 10 year period. PPLICA reasons that, therefore, recovery over a 10 year period, of the expense, is reasonable. It would essentially disregard the assertion that the longer amortization could deny cost, on a present value basis.

PP&L, in its main brief, asserts that this retirement program has not produced cost savings. It reasons that there is no basis for the adjustment, since the imputed cost savings have not been generated to date. PP&L further states that it has already reflected a full year of savings in its rate filing. It acknowledges that there might be some modest level of savings realized later in the future test year but it also asserts that it will experience increased expenses and plant additions during the same time period. It discerns an inconsistency in reflecting cost savings of this program while not recognizing other additional costs during the same period.

PP&L further views the 10 year amortization period as inconsistent with the general Commission treatment of similar

costs. It points out that Pennsylvania does not allow a return on these amortizations and characterizes the five year duration as consistent with precedent. Its fundamental position is that a 10 year amortization period simply delays cost recovery for too long.

The continued PP&L discussion commences at page 27 of its reply brief. It again describes the adjustments offered. PP&L repeats its arguments against the two adjustments. It states that net cost has not been down. It further argues that the first adjustment would recognize a one-time, isolated decrease without recognizing off-setting increases. Concerning the amortization period, it adds the thought that PP&L's expenditures under the program will mostly be made during the initial five year period.

In this instance, I agree with PP&L on both adjustments. I do not discern evidence of cost decreases sufficient to justify the proposed adjustment. I can agree that some of the cost increases associated with the recent months might not be continued over the long term. However, I find no good basis for adding the short-term information for creation of an adjustment. I view the original PP&L proposal as a better measure of the impact of this program. Concerning the amortization period, I also agree with PP&L. The total program might last longer, in the sense indicated by PPLICA. However, there is no return allowed on the amortizations and I would not string out the cost recovery to be allowed PP&L. In my view, a five year period is more consistent with past practice and with the facts than would be a ten year

period. Concerning cost patterns see PP&L main brief, page 80, footnote 25. Reasonable minds could differ concerning this matter but, on the whole, I view the PP&L proposal as better than the alternatives proposed by the two other parties.

C. Post-Retirement Benefits (SFAS 106)

Two distinct issues fall into this topic. First, PP&L argues (main brief, page 91) that its claim does not violate the general rule against retroactive or single-issue ratemaking. It also argues that the proposed discount rate is appropriate and should be accepted. OTS, OCA and PPLICA provide counter-arguments.

This topic relates to SFAS 106 which required all companies subject to generally accepted accounting principles to use an accrual method of accounting, rather than a cash method, for post-retirement benefits other than pensions. Adoption of this standard served to increase the level of benefits reflected in financial statements and produce significant transition costs from the former methods. PP&L proposes to recover a total of approximately $28 million relating to SFAS 106. This total includes approximately $26 million in current costs plus $1.8 million in deferred SFAS 106 costs, consisting of a 17.3 year amortization of approximately $31 million. This situation is not unique to PP&L but is a familiar topic of litigation recently. The fundamental challenge against the deferred costs is essentially a "retroactive ratemaking" challenge. The argument is that this matter is a matter of past history and, for better or worse, should not be a matter of prospective ratemaking.

The OTS argument commences at page 91 of its main brief. It first explains the background. It relates that the matter was raised during 1992, when PP&L filed a petition requesting permission to defer costs.

OTS refers to a Commonwealth Court decision and asserts that allowance of the deferred expense is barred by the doctrine of retroactive ratemaking. It indicates the view that the Commission should not set future rates to allow collection for past losses. It further states that most of the arguments advanced by PP&L, on rebuttal, were rejected by the court in the referenced 1994 decision involving PP&L. In its opinion, Commonwealth Court had explained that the exception for "extraordinary" expenses did not apply to that situation. The fundamental point is that the Company could have come in for a general rate proceeding earlier.

OTS also argues that the SFAS 106 ruling was not unanticipated and could have been reflected earlier. It would further characterize an extraordinary expense as a one-time expense for a substantial item that would not appear as a continuing expense. The fundamental view is that an extraordinary expense is one which comes "out of the blue" and would never be recovered if ratemaking were strictly prospective. OTS drops a footnote concerning the history of SFAS 106. It proposes a simple denial of the requested amortization.

OTS continues its SFAS 106 discussion in its reply brief, commencing at page 41. It characterizes its differences with PP&L as resting solely on differences in interpretation of court

precedent. It states that the Commission's treatment of the PP&L transition obligation was not appealed to Commonwealth Court. It further develops its fundamental argument.

OTS states that Commonwealth Court dismissed the fundamental PP&L position on the premise that incremental costs were anticipated at an earlier time and could have been recovered in an earlier proceeding. It would apply the same ruling to this PP&L request for incremental costs. OTS refers to a Pennsylvania-American case in Commonwealth Court where the finding was no retroactive ratemaking because Pennsylvania-American was merely requesting a timing change and not attempting to correct an incorrect projection. OTS argues that the Pennsylvania-American situation does not shield PP&L here. OTS would view PP&L as not having taken the first opportunity to really do a rate case. OTS states that PP&L has misconstrued the case law and has not successfully distinguished the court precedent.

OCA addresses this matter, commencing at page 151 of its main brief. OCA too explains the situation. It provides a history of the claim. It then argues that the claim must be denied because it is retroactive ratemaking. It refers to court precedent and to a Commission decision in a West Penn case. OCA would view court precedent as controlling. OCA also states that, in the West Penn case, the Commission held that West Penn had failed to claim costs in a timely manner and that the rule against retroactive ratemaking should preclude recovery.

The OCA reply brief discussion of this matter commences at page 67. OCA refers to its arguments in its main brief and to the general rule against retroactive ratemaking. Like PP&L and OTS, it argues the court precedent. OCA would see no distinction in claiming this cost in a general rate increase proceeding as opposed to some other type of proceeding. OCA carefully explains its interpretations of the court statements. OCA refers to both the PP&L court precedent and the Pennsylvania-American court precedent. It states that, in the Pennsylvania-American case, the court was not presented with a question of whether a recovery of deferred SFAS 106 cost is either retroactive ratemaking or an "extraordinary cost". OCA proposes an adjustment of approximately $1 million.

PPLICA commences its discussion of this SFAS 106 issue at page 44 of its main brief. It states that the Commission authorized deferral of these amounts but that this order was subsequently reversed by Commonwealth Court. PPLICA further states that the matter is pending before the Supreme Court. It would find that the Commission is legally precluded from approving the PP&L proposal.

PPLICA develops this matter at additional length, in its reply brief, commencing at page 32. It reviews the case law, as do other parties. PPLICA observes that both the PP&L precedent and the Pennsylvania-American precedent are pending before the state Supreme Court. It further states that this PP&L claim should be

denied, to make the result consistent with the recent Commission action in a West Penn case.

PP&L discusses this matter, commencing at page 91 of its main brief and at page 33 of its reply brief. It begins with a general proposition that utilities are prohibited from recovering past costs through future rates. It adds, however, that there is an exception to the rule for extraordinary and non-recurring expenses. It gives an example of an amortization of prior period tax losses. It asserts that, in this instance, its SFAS 106 claim does not reflect surpluses or deficits created by a prior inaccurate rate authorization. It further asserts that the SFAS 106 change only altered the timing of recovery of cost and not the total amount of recovery. It draws the conclusion that this SFAS 106 claim does not violate the general rule against retroactive ratemaking.

PP&L also asserts that, in a base rate proceeding, there is an exception for extraordinary and non-recurring expenses. It further indicates the view that these expenses fall under this exception. It refers to the Pennsylvania-American decision by Commonwealth Court. It then refers to the Court's PP&L decision. PP&L, too, refers to the fact that this decision is on appeal to the state Supreme Court.

PP&L, in a separate sub-section to its argument, at page 96, refers to the proposed discount rate relating to post-retirement benefits and to pension expense. This is a

reference to an issue raised by OCA. The discount rate discussion will be addressed, below. OCA treats the two matters together.

PP&L addresses the same fundamental arguments in its reply brief. It discusses the case law and the factual underpinnings of the case law. It argues that, in West Penn, the Commission was dealing with SFAS 106 costs which had not been captured in the expenses allowed in the utility's previous rate case. PP&L views this West Penn situation as a classic violation of the rule against retroactive ratemaking.

Concerning this topic, and leaving aside the question of the discount rate, I agree with PP&L. I view the SFAS 106 change as an extraordinary event, a one time event. It occurred outside the test year but should be recognized. I do not feel that I am controlled by case law which could be read either way and is, in addition, on appeal. I agree with PP&L that this sort of adjustment can be considered in a base rate proceeding better than in a non-base rate proceeding. We should be careful in these sorts of recognitions but lack of this recognition would be unfair to the utility.

D. Pension Expense

PP&L bases its pension cost claim on an accrual method. It states that OTS and OCA propose complete disallowances of this claim. The OTS theory is that PP&L will not be making any cash contributions to the fund during the future test year. OCA bases its disallowance proposal on its view of the appropriate discount rate involved.

The OTS discussion begins at page 86 of its main brief, where it recommends a $10,224,000 reduction to operating expenses and a $5,273,000 reduction to rate base. It refers to SFAS 87. It also refers to alternative computations made to comply with the Employer Retirement Income Security Act (ERISA) and IRS rules. This is in the nature of a cash contribution. It further states that, in this instance, there is no cash contribution required. OTS would treat pension expense on a cash only basis and refers to precedent. It refers to PP&L testimony that cash contributions are projected for 1996. It views this as speculation and states that, in any event, payment will not occur until even later. With the lack of cash contributions, it would find no basis for a claim.

OTS again addresses this matter in its reply brief, commencing at page 38. It responds to the PP&L argument in favor of an accrual basis. It refers to PP&L reliance on a West Penn case but offers factual distinctions. OTS again refers to its witness's testimony about payments occurring not until 1998. It adds additional related arguments. It would discount PP&L arguments relating to potential future payments, indicating that PP&L may have another base case within two years.

As PP&L states, the OCA argument concerning this topic is based on a difference of opinion relating to discount rates. The same argument refers to the SFAS 106 matter. OCA discusses these arguments together, commencing at page 147 of its main brief. I will follow OCA in discussing them together, under a separate

heading. I will first proceed to discuss the OTS adjustment to the PP&L claim.

The PP&L discussion of the OTS adjustment commences at page 85 of its main brief. It provides several reasons why the OTS adjustment, based on testimony of Mr. Weakley, should be rejected. It first argues that pension expense is an extremely variable cost, from year to year. It further views the OTS adjustment as inconsistent with the Commission adoption of SFAS 106, relating to other forms of post-retirement benefits. PP&L takes the position that it makes no sense to calculate pension expense on a cash basis yet calculate retirement benefits other than pensions on an accrual basis. PP&L also views this choice as consistent with Commission precedent.

PP&L also addresses pension expense in its reply brief, commencing at page 29. It refers to both the argument of OTS and the argument of OCA. It discusses the West Penn case at some length.

OTS presents a good, coherent argument. However, I find myself in agreement with PP&L. Precedent provides mixed guidance but I agree with the fundamental principle that an accrual method is better than a cash method. Use of the accrual method should be fair to both ratepayers and stockholders, if that method is used consistently. We are really dealing with timing differences which should work out over time. Moreover, the accrual method would seem to be providing for a more consistent and less variable expense element. I also accept the argument that this issue should be

decided the same way as the SFAS 106 issue. I reject the OTS adjustment.

E. The OCA Discount Rate Argument

OCA addresses this matter, commencing at page 147 of its main brief. PP&L presents its main argument commencing at page 89 of its main brief with a reference, within the SFAS 106 discussion, at page 96 of its main brief. It presents a related argument, commencing at page 31 of its reply brief. The corresponding OCA reply brief argument commences at page 64.

OCA would increase the discount rate for both pension and post-retirement benefits costs from 7.5 percent to 8.5 percent, in order to reflect current market bond yields. It refers to the testimony of its witness. The fundamental point is that relevant yield has increased. OCA views this as merely reflecting the market rate. It refers to use of an 8.75 rate by the PP&L actuary in another proceeding. OCA also refers to other uses of a higher discount rate.

OCA repeats its fundamental references in its reply brief. It also responds to PP&L. It essentially takes the position that PP&L has not provided the appropriate details underlying its choice of 7.5 percent. The OCA argument indicates a view that PP&L is simply out of step with a general consensus that the discount rate is more like 8.5 percent than 7.5 percent.

PP&L refers to the need for an exercise of informed judgment. It indicates the view that its 7.5 percent is within an appropriate range. It would find its choice to be reasonable.

Starting at page 31 of its reply brief, PP&L again addresses this discount rate matter. It would not merely rely on choices of other utilities. It next refers to the possibility of 7.9 percent as a reasonable choice. It also refers to rate of return testimony indicating a decline in rates. PP&L further states that its burden of proof is not to disprove other possibilities but to provide reasonable support for its own position.

I can agree with PP&L that it has met the fundamental burden of proof. However, OCA has also provided a substantial case concerning this discount rate matter. I must decide which party has the better argument. OCA provides numbers above 7.5 percent and its argument is rather persuasive. However, the other numbers could be wrong and PP&L could be right. The OCA approach is not particularly systematic but, on the other hand, PP&L could have provided a better defense of its choice.

This topic is rather like the topic of the proper equity return, where various numbers can be supplied and reasonable minds can differ. Upon consideration of the matter, I accept the PP&L 7.5 percent, largely based on the arguments contained at page 32 of the PP&L reply brief. Rates may have been up but appear to be declining at the moment. We are looking toward the future and the PP&L number happens to appear to be correct, for the future. I accept 7.5 percent as more reasonable than 8.5 percent.

F. The SFAS 112 Claim

SFAS 112 concerns accounting treatment of long-term disability and other benefits provided to employees and their families. The PP&L claim reflects an accrual for the anticipated increase in future liabilities, for these long-term benefits. OCA would retain a cash basis, thereby reducing the Company's expense claim by $592,000 on a jurisdictional basis.

The OCA argument commences at page 156 of its main brief. OCA opens with a quote from its witness's testimony, to the effect that the PP&L claim is a projection and is in addition to the actual benefits which PP&L will pay during the future test year. OCA further states that PP&L intends to pay these costs on a pay-as-you-go basis and has no plan to establish a separate fund for this liability. OCA indicates that the Company plans no changes in actual payment methods. It would draw a distinction between SFAS 106 and SFAS 112.

OCA again addresses this matter in its reply brief, commencing at page 71. It states that PP&L's proposed ratemaking treatment is inconsistent with its own plan to continue to fund these liabilities on a cash basis.

PP&L, commencing at page 96 of its main brief, explains the background and then argues that it keeps its books and records on an accrual basis. It further states that the accrual method of SFAS 112 is fully consistent with generally accepted accounting principles and well-established ratemaking principles. It looks to a consistency with other types of benefit expenses, and refers to

SFAS 106. It asserts that the OCA witness offered no reasoned basis for continuing the cash method. PP&L, at page 37 of its reply brief, reviews the arguments and refers to its main brief.

Reference to the record indicates that these liabilities are relatively short-term and I find no argument that the claim should be denied as too speculative. OCA essentially asserts that there is no particular fund for these amounts and that PP&L should not be allowed to collect revenues before it actually pays out the funds in question. It distinguishes the SFAS 106 situation. It does not quarrel with the timing differences which can be handled outside of this item.

PP&L essentially argues that an accrual basis is reasonable and consistent with other accruals. It would have revenue collection occur when the fundamental liability is incurred, not when funds are ultimately paid out. I would be more comfortable if there were a separate fund, with monitoring of income and expenditures. However, such monitoring, or lack of monitoring, is not a significant problem. PP&L's handling of these funds can be readily tracked and reviewed. I accept the fundamental PP&L argument that this item should be treated like other similar items and reject the OCA adjustment.

G. The Susquehanna Early Window Deferrals

PP&L, OTS and OCA address this matter. PP&L commences at page 98 of its main brief while the corresponding arguments of the two other parties each commence at page 103 of the main brief. As PP&L explains, the early window deferrals involve operating and

maintenance expenses incurred between the date a new generating unit enters commercial operation and the date it is recognized in rates.

OTS provides various relevant dates. Susquehanna 1 went into service on June 8, 1983 and is recognized in rates effective August 22, 1983 while Susquehanna 2 went into service February 12, 1985 and was recognized in rates effective April 26, 1985. The Commission had, during 1982 and again during 1983, authorized these two deferrals. Those authorizing orders had left the question of justness and reasonableness of costs and rates for a later proceeding.

OTS takes the position that the claims should be disallowed because PP&L failed to claim any recovery of these expenses at the first opportunity available and because recovery constitutes impermissible retroactive ratemaking. It argues that, in the case of Susquehanna 1, the Company had the Susquehanna 2 base rate proceeding available shortly thereafter and did not claim the Susquehanna 1 deferrals at that time. It observes that PP&L takes the position that it did not make a claim in this 1984-1985 Susquehanna 2 case because it wanted to minimize the amount being requested in that case. OTS takes the position, with respect to Susquehanna 2, that PP&L could have filed an earlier rate case and not waited 10 years to seek recovery. It observes that PP&L had taken the position that it had a corporate objective of delaying a base rate case in order to maintain rate stability.

OTS refers to a Commonwealth Court opinion for the proposition that retroactive ratemaking is not to be favored and asserts that PP&L should have come in earlier. Fundamentally, OTS takes a position against retroactive ratemaking, finding no valid exception here.

OTS responds to PP&L, commencing at page 45 of its reply brief. OTS observes that PP&L relied on Commission decisions but OTS refers to Commonwealth Court decisions in its counter-argument. It views recent Commonwealth Court decisions as more pertinent than the references made by PP&L. It again refers to the possibility of previous opportunities to make these claims. It also states that these expenses were not unusual and were not unforeseeable.

OCA introduces the background of the matter, as do the other two parties (OCA main brief, page 103). It then outlines the general rule against retroactive ratemaking, with reference to limited exceptions it recognizes. It refers to such matters as Philadelphia Electric Company pollution control equipment. It further states that the Commission has made it clear that recovery of deferred early window costs is not to become part of the routine regulatory practice. It also points out that the mere granting of the accounting accrual does not mean that there will be subsequent approval of the expense.

It refers to two instances where the Commission allowed this recovery. There are indications in these decisions, and associated opinions, that there is no green light for these deferrals and that the costs should be extraordinary and

nonrecurring. There is also an indication of some tie in to a financial impact on the utility.

OCA provides a review of the time limits on this matter as well, with indications that the utility should claim these costs promptly after the incurrence of the costs.

The OCA reply brief discussion commences at page 48 of that brief. It again refers to the rule against retroactive ratemaking. All agree about this rule. OCA further states that PP&L has not shown that there should be departure from the basic rule, in this instance. It refers to the various precedents which have been produced relating to this matter. It also discusses the element of negative financial impact. The dollar amount involved here is approximately $40 million. It views this amount, as a write-off, as relatively minor, compared to amounts allowed by the Commission previously.

OCA also refers to the fact that the Company did not seek these reimbursements sooner. OCA agrees that the previous Commission orders did not set a time limit on recovery. It asserts that PP&L still must present a timely claim in order to recover these costs. It asserts that current ratepayers should not have to pay for expenses from 10 years ago. It would emphasize the rule against retroactive ratemaking and minimize the argument by PP&L that this rule would encourage more frequent base rate proceedings. In closing, it emphasizes that these retroactive allowances should not become a regular practice and that this situation does not rise to one warranting special treatment by the Commission.

PP&L sets up the matter as arguments relating to timeliness and the general rule against retroactive ratemaking. It mentions that it is seeking a 10 year amortization of the amount of roughly $40 million. It refers to the lack of a time limit in the Commission "early window" orders. It also makes the policy argument that a strict time limit requirement would encourage frequent rate cases. It refers to the magnitude of the Susquehanna 2 rate filing and its own desire to avoid additional expenses at that point. It further argues that it is not seeking to violate the general rule against retroactive ratemaking. It refers to precedent. It states that the construction of a new nuclear plant is obviously extraordinary and non-recurring. It also refers to a Philadelphia Electric case which it views as on point. It would not be concerned about the OCA financial condition requirement, relating to the impact on the utility.

PP&L again addresses this matter in its reply brief, starting at page 38. It covers the same elements, arguing that its claim is timely in both instances and that there is no violation of the rule against retroactive ratemaking. It also asserts that denial of this claim now would have a substantial adverse impact on PP&L earnings. It refers to a drop of close to 18 percent for 1995. It disagrees with OCA concerning PP&L's financial status over the last 10 years.

I find no assertion that the costs in question were imprudent or that they should not be recognized, themselves. The arguments are that any allowance now would involve retroactive

ratemaking and that PP&L has simply waited too long for recovery of these costs. I have no particular difficulty about the retroactive ratemaking allegations. PP&L carefully asked for Commission allowance of these accruals and I agree with PP&L that the event in question was unusual and not the sort that would reoccur frequently. The two events, the bringing of the two plants into service, were certainly anticipated but the arguments do not turn on this fact.

Given the total picture, and the not insignificant impact on PP&L finances, I am inclined to allow the two recognitions, on the retroactive ratemaking issue. This is especially true because the Commission had indicated to PP&L that, absent imprudence or some other similar problem, it could recover these costs later. Moreover, this is the sort of major event which can reasonably be handled with such special treatment. The financial impact is significant and the utility should not be forced to time its rate case exactly, to meet the timing of the plants.

I have more trouble with the PP&L delay in seeking recognition of these costs. I can accept the Susquehanna 2 delay, because there has been no base rate case until this one. I would not require a particular, special, rate case just to recognize these costs. However, the Susquehanna 2 case came shortly after the Susquehanna 1 case and PP&L could well have claimed the Susquehanna 1 costs in the Susquehanna 2 case. It states that it sought to keep the Susquehanna 2 increase as low as it could, the increase having been high as it was. I do not accept this answer.

This case was for $330 million and the amount involved here would not have greatly impacted the total cost. There might have been other reasons to avoid recognition at that time. However, they have not been stressed and I am not about to find them out myself. Given the early chance PP&L had to seek recognition of the Susquehanna 1 costs, I conclude that the claim for Susquehanna 1 early window amortization should be denied, reducing annual O&M expense by $2,035,000. I accept the Susquehanna 2 amortization cost of $1,886,000 per year.

H. Susquehanna Refueling Outage Expense

OCA addresses this topic, commencing at page 117 of its main brief and at page 52 of its reply brief. The corresponding PP&L discussions commence at page 103 of its main brief and at page 46 of its reply brief.

OCA observes that PP&L normalizes refueling outage costs by, typically, amortizing over 18 months, the period between refueling outages. PP&L proposes that we look at the most recent outage for each unit as a measure. It also states that the annual amortization associated with reload six at Susquehanna 2, reflected in the future test year, were unusually high. OCA reviews the PP&L rebuttal testimony and relies on its own surrebuttal testimony. This involves, in part, a comparison between unit 1 and unit 2. The parties differ about the relative costs of the units. OCA would base an amortization on the costs of reload eight at Susquehanna Unit 1 and of reload seven at unit 2. The jurisdictional adjustment is slightly more than $1 million.

The reply brief argument commences at page 52. OCA responds to the PP&L assertion that its adjustment is arbitrary and unsupported. OCA again refers to problems for reload six at unit 2. It would have the cost reflect the most recent outages at the units.

PP&L, in its main brief, reviews the matter and emphasizes the OCA avoidance of the unit 2 reload six costs. It compares these costs to those for unit 1 reload eight projected costs and would have unit 2 reload six found to be reasonable. It characterizes the OCA adjustment as arbitrary and unsupported. In its reply brief, PP&L emphasizes the argument that it is more appropriate to determine the refueling outage expenses based on the most recent actual costs (unit 1 reload seven and unit 2 reload six) rather than the estimated data relied on by OCA.

The fundamental OCA argument is that costs for reload six at unit 2 were abnormally high and should not be used as a measure for ratemaking purposes. OCA might support an adjustment going further back in time but the OCA approach does seem to be arbitrary. I would strive for consistency in ratemaking rather than jumping from one measure to another, depending on the result or depending on particular details of the data. I do not find reload six at unit 2 to be so out of line that it should not be used as an appropriate measure for this ratemaking calculation. I accept the PP&L position and reject the adjustment.

I. Environmental Remediation Costs

OTS discusses this topic, commencing at page 84 of its main brief. PP&L's discussion commences at page 105 of its main brief. PP&L refers to the OTS adjustment and to an OCA adjustment. However, it also indicates that the OCA adjustment might not have been pressed. OTS pressed the challenge of this claim related to cleanup of various sites in order to reduce environmental impact.

OTS criticizes the PP&L claim as speculative in nature and based primarily on potential future costs. It points out that, between the filing of OTS direct testimony and the filing of rebuttal testimony, PP&L and the Department of Environmental Resources (DER) reached an agreement concerning cleanup efforts. The agreement provides for a 10 year program impacting on 134 sites. PP&L will spend up to $5 million a year on investigation and cleanup. In recognition of the agreement, OTS reduced its disallowance recommendation by a considerable amount. OTS points out that the agreement calls for PP&L to spend up to $5 million a year. PP&L's claim had been based on $5.4 million a year. OTS focuses on this $400,000 difference and recommends a slightly smaller disallowance.

OTS responds to PP&L, commencing at page 32 of its reply brief. It points out that its final adjustment was based on PP&L information. It discusses the use of a press release, because events were quite recent. It points out the proposal of $5.4 million and the apparent final agreement at $5 million or, perhaps, less. It focuses on the $400,000 difference. It argues

that the Company should explain the reduction. OTS would have the agreement control and not various differences pointed out by PP&L concerning the spring of 1995. It proposes a $326,000 reduction.

PP&L first describes the situation on the originally proposed adjustments. It refers to the April 27, 1995 agreement between PP&L and DER. It refers to work during the spring after the ground has thawed, a reference to, presumably, previous adjustments. It points out that the OCA witness withdrew his proposed adjustment.

In its reply brief, starting at page 47, it provides a jurisdictional adjustment, based on the final OTS position. It appears to agree that the adjustment is based on the difference between the $5.4 million as originally estimated and the maximum amount which appears to be provided for in the agreement with DER. It points out that the agreement does not prohibit the Company from spending additional amounts. It asserts that its original claim of $5.4 million is reasonable.

Under the circumstances, I find the OTS final adjustment to be appropriate. The agreement apparently calls for PP&L to spend up to $5 million. It could spend more but it could also spend less. I would base the projection on the agreement and focus on the $5 million, which is apparently the OTS position. This modest adjustment appears to be quite proper and an improvement upon the original PP&L projection. I observe that this adjustment was based on information which became available during litigation.

J. Uncollectible Accounts

The PP&L discussion of this topic commences at page 107 of its main brief. OTS has, essentially, two adjustments. Its discussions commence at page 97 and at page 101 of its main brief. As PP&L points out, there are essentially two claims. We have approximately $17 million for normal uncollectible accounts expenses and slightly less than $1 million for costs associated with PP&L's customer assistance program, which is referred to as the OnTrack Payment Program (OTPP).

OTS begins by identifying uncollectible accounts as specific receivables that are determined to be uncollectible in whole or in part, either because the debtors cannot pay or because the creditor finds it impracticable to enforce payment. It points out that this is a prospective claim, normally based on an historic analysis. It refers to the total PP&L claim, the general claim, and breaks this down into three elements. It also refers to the possibility of an upward trend or downward trend. It points out that the PP&L claim is the funding needed to restore the provision to the projected requirement. It points out the number claimed does not reflect the PP&L projected actual write-offs but is based on the amount of dollars needed to fund the reserve to the projected uncollectible provision requirement.

OTS views the Company method as arbitrary. It refers to Company rebuttal concerning the future write-offs. It also refers to other matters, including a decreasing trend in write-offs. It

states that the PP&L funding reserve fails to show the same decreasing trend and recommends an expense reduction of $1,234,000.

OTS next discusses the OTPP. This is a pilot program designed to assist residential customers with low income. It refers to administrative costs and actual uncollectible expense. There are forgivenesses involved. OTS then refers to the funding associated with the Low Income Home Energy Assistance Program (LIHEAP). PP&L projects this funding, based on a federal program, on grants of $233 per customer. There was controversy about potential reductions in the level of LIHEAP funding and OTS asserts that the Company should have provided better information. Concerning this sub-topic, OTS has an adjustment of $140,000 to the uncollectible accounts expense claim.

PP&L, in its main brief, refers to the OTS adjustment as based on actual write-offs rather than the provision for uncollectibles. PP&L asserts that it has demonstrated that it is more appropriate to use the provision for uncollectibles because it is consistent with the same future test year sales levels utilized by PP&L to determine pro forma present rate revenues. It points out that, in contrast, the lower write-off of OTS is associated with past experience. It views its method as affording a better matching of revenue and expense. It also states that projected future test year write-offs are low by the OTS method in comparison to historic experience. It states that, if OTS had used a three year actual average, it would better reflect cost and would actually have been higher, as a projection, than PP&L.

PP&L also asserts that it has followed an extremely conservative approach and has not reflected incremental uncollectibles associated with the rate increase. It asserts that this adjustment would have been $1.6 million. It states that there is no support for the OTS adjustment. In a footnote, PP&L suggests that OTS has used a three year average previously.

At page 109, PP&L turns to the OTPP adjustment, associated with the LIHEAP funding. It points out that the OTS adjustment is intended to reflect amounts received under LIHEAP on behalf of the particular customers participating in the OTPP. It agrees that the projection does not reflect LIHEAP cash benefits or crisis benefits. It points out that it had little information and that government policy appears to be changing. It suggests that an adjustment of $130,000 would be more appropriate if an adjustment is to be made. However, it does not accept any adjustment at all. It suggests that federal funding for LIHEAP has been substantially reduced and is probably going to be reduced additionally. It might even be eliminated, according to PP&L. It points out Commission concern with this matter. It further points to a past trend of reductions in federal funding for LIHEAP. It even points to a March 16, 1995 vote by the U.S. House of Representatives, to eliminate funding. It states that the OTS adjustment should be rejected.

PP&L, commencing at page 48 of its reply brief, again addresses this matter. For the normal uncollectible expense adjustment it refers to its provision for uncollectible expense

instead of projected actual write-offs. It asserts that its proposal provides a better matching of expenses and revenues than the OTS methodology. It refers to the OTS assertion that there is a decreasing trend in actual write-offs and again refers to a three-year average as a base. It further states that the three-year average would produce a slight increase in the expense. It also refers to the change associated with a rate increase. Concerning LIHEAP, PP&L argues that LIHEAP has been reduced and will likely continue to decrease or be eliminated. It drops a footnote to a PP&L statement which indicates a maximum adjustment of $130,000.

The larger adjustment within this topic, the normal uncollectible accounts adjustment, appears to be based on a difference between PP&L and OTS, relating to use of the PP&L provision for uncollectibles or the use of actual projected write-offs. However, OTS is also arguing that there is an obvious trend, a decreasing trend, of these uncollectibles. This is why the OTS provides its own number for development of the total uncollectible accounts expense. Concerning the trend, see the table at page 27 of OTS Statement No. 4 (Mr. Weakley).

PP&L provides various counter-arguments. One of these is that it could have claimed a larger allowance because of the requested rate increase. However, it did not do so and a brief statement of this possibility on rebuttal is a bit late to join the issue concerning this adjustment. PP&L should have made the claim at the beginning of the case. All in all, I agree with OTS

concerning the fundamental adjustment reducing operating expenses by $1,234,000. It seems to properly reflect a trend and to be a better measure of expected experience.

Concerning the smaller adjustment relating to OTPP and LIHEAP, I agree with PP&L that funding for this program is uncertain. However, we are not clear about the uncertainty and, for now, I will go along with the OTS adjusted, as recalculated by PP&L. This brings the smaller adjustment, relating to OTPP, down to $130,000. To review, I accept the larger OTS adjustment and accept the PP&L version of the smaller (OTPP) adjustment. I do not know what the future will hold, exactly, but I find the OTS arguments to be convincing.

K. Rate Case Expense

PP&L normalizes the test year rate case expense over a two-year period. OTS suggests a four-year period while DOD suggests a three-year period. The discussions commence at page 111 of the PP&L main brief, page 67 of the OTS main brief and page 11 of the DOD main brief. PP&L argues, fundamentally, that the conditions which allowed to stay-out for approximately 10 years are unlikely to recur in the near future. It points out that, if this long stay-out is excluded from the OTS calculations, the average rate case filing period is 2.3 years. It further argues that it might have to come in sooner than two years from now. This would depend, of course, on the rate relief granted in this proceeding.

OTS does not question the prudency of the basic amount of money involved but does question the two year normalization. It

indicates that PP&L has little explicit basis for its choice of two years as a normalization. OTS looks to the Company's history regarding frequency of rate filings. It looks to a 20 year period. It gets an average stay-out of 48 months. It acknowledges the long period since the last case. It agrees that this could be an aberration but argues that shorter periods could also be unusual. It simply takes the data from the history of the company and would not adjust it one way or the other. The result is a recommended reduction to O&M expense of $373,000.

OTS addresses this matter again in its reply brief, commencing at page 35. It views the Company's position as being based on speculation. It again refers to the history of stay-outs. It finds no support for the two-year figure used by PP&L.

DOD also opposes the rapid recovery of rate case expenses proposed by PP&L. Its witness suggested a three-year period for an amortization. DOD also refers to the OTS position.

PP&L again addresses this matter in its reply brief, starting at page 49. It addresses mainly the OTS position, because of a minimal discussion by DOD. It again focuses on the most recent stay-out and characterizes this as unusual.

I tend to agree with PP&L that the stay-out following this proceeding could depend on the scope of relief granted in the proceeding. I also sympathize with PP&L because the future of stay-outs is difficult to predict, at this point. However, OTS has produced a basis for its result and I am not inclined to entirely disregard the most recent 10 year stay-out. PP&L excludes the most

recent stay-out and gets a filing period of 2.3 years. However, I choose the OTS four year result as the best projection, based on history. PP&L might well be back before the four year period has expired but we must accept the uncertainty. In any case, I accept the OTS adjustment. At least, the four year projection of OTS is well below the 10 year period associated with the most recent stay-out.

L. Social Programs

This is one example of a "money" issue which is addressed by parties other than the parties which are addressing the revenues and expenses generally, PP&L, OCA, OTS and DOD. I have reviewed all of the briefs and will address them in detail. However, some of my review will be in a separate part of this decision, concerning the various briefs. Several briefs have some impact on this particular issue. However, I will limit my discussion here to briefs filed by PP&L, OTS, OCA and, in addition, the Commission on Economic Opportunity (an organization based up at Wilkes-Barre).

The Commission on Economic Opportunity (CEO) addressed this topic, along with demand side management, in its main brief. Its arguments impact choices concerning revenue adjustments. I will review this brief, and other briefs, at the "various briefs" portion of my decision. I use this separate discussion of briefs partly because there are two motions pending to strike portions of briefs. A final decision should take into account all the arguments of all the parties. I add only that arguments presented

for the first time in reply briefs are presented rather late, although they will be given attention.

PP&L explains its proposals, commencing at page 113 of its main brief. It states that it proposes to undertake several new customer and community needs programs, including the following:

Build-A-Neighborhood Program
Affordable Housing Program
Small Business Program
Keep Warm Plan
Payment Protection Plan
Winter Emergency Plan
Operation HELP Contribution Enhancement Program
CARES Extension Pilot Program

PP&L refers to testimony for details. It states that, in general, these programs are designed to promote the effective usage of electricity, to promote economic development and to provide social services support in PP&L's service territory. PP&L states a belief that these programs are in the best interest of the Company and its customers, and are an important part of the overall corporate mission. PP&L further states that the total annual projected cost of these programs is $6.7 million, $3.5 million (conservation, efficiency, load management and rate incentive programs) for which PP&L seeks rate recovery and $3.2 million (other program costs including charitable contributions, neighborhood improvements, closing and real estate costs, grants for small businesses) which will be funded entirely by shareholders.

PP&L states that OTS proposes disallowance of 70 percent of the ratepayer funded programs, for ratemaking purposes. PP&L proceeds to outline the OTS objections. It then responds.

OTS commences its main brief discussion of this matter at page 72. It refers to six new social programs and funding for two existing programs. It provides essentially the same dollar amounts as referenced by PP&L. It also lists the eight programs, in a slightly different order. It provides total funding and ratepayer funding for each program. It then refers to a social initiatives task force, consisting of seven PP&L employees, which produced a 1994 report. It also refers to four objectives provided by PP&L. OTS praises PP&L for its development of the programs and a willingness to address these issues. However, it is recommending total disallowance of costs relating to Build-A-Neighborhood, Affordable Housing and Small Business Programs for a total recommended disallowance of $2,500,000.

It argues that these programs are not driven by specific Commission approved regulatory goals, do not provide discernible benefits to ratepayers, are being funded by forced contributions, are not compatible with the competitive environment evolving in the electric industry and would be illegally funded if ratepayers were to foot the bill. It provides descriptions of the various programs. This had been provided by PP&L witness Stathos. OTS takes the position that PP&L is motivated by a desire to address socio-economic problems in its service territory. OTS expresses the belief that this expenditure of ratepayer money is illegal and potentially presents issues that were never contemplated by the Public Utility Code.

OTS continues its discussions at page 52 of its reply brief. It argues that PP&L has sought to link these programs with other approved programs. It views these linkage attempts as merely a disguise as to the true nature of these new programs. It refers to a PP&L statement that these programs are simply an expansion of existing Commission-approved programs. It suggests that these programs go beyond the scope of previous undertakings.

OTS addresses such problems as the problem when a major customer threatens to leave the system. It accepts the premise that the Commission should allow the utility some flexibility in rate structure. It argues, however, that none of the precedents supports the utility's attempt to solve socio-economic problems of customers outside of the normal rate structure methods. It discerns no evidence that these programs will benefit all of the ratepayers, from a ratemaking standpoint. OTS even suggests that these programs would have an adverse impact on other customers. It further reviews PP&L statements and suggests that PP&L is seeking to solve social problems unrelated to customer ability to pay electric bills.

OTS suggests that PP&L is attempting to do what various other agencies of government are designed to do. It does not dispute the benefits which PP&L suggests. It does suggest that this is not the primary issue. It states the issue as whether payment for these programs should be accomplished through the ratemaking process.

CEO discusses these issues, concerning the social programs, commencing at page 5 of its main brief. It provides four fundamental assertions: that WRAP program funding should be increased, that programs are more than public relations tools and should not be company jobs programs, that funding must be distributed according to need and that base load customers should not be neglected. It mentions the Keep Warm Program but indicates that this program will target ratepayers at 150-200 percent of the federal poverty line. CEO accepts this new program but argues that increases for the WRAP Program are in the best interest of PP&L and its low income customers. It asserts that WRAP funding is inadequate in terms of existing need and that a rate increase will make the matter worse. It provides details. It projects continuing positive benefits, if WRAP funding is increased. It suggests that an increase in WRAP funding could be a function of the rate increase granted in this proceeding.

It suggests that PP&L has a motivation of getting good public relations out of these programs. It does not wish to impugn PP&L motives and agrees that this is not the primary reason for the programs. However, CEO is concerned about what appears to be the secondary benefits contemplated. It mentions the bringing of the matters in-house. It suggests that PP&L not continue to build up its in-house functions but that it use outside sources. It would like PP&L to work closely with existing community-based organizations, across its service territory.

The CEO concern about funding is based somewhat on changes in PP&L's service divisions and the merger of the northern (Scranton) division with the central (Wilkes-Barre/Hazleton) division. It is concerned about mathematics which would reduce the funding for its region. CEO is also concerned about funding to meet needs rather than numbers. It would consult demographics and put the money where it is needed. It is, of course, concerned about its own region. It also points out that the northeast region is colder than other areas of PP&L territory. It further indicates that this would not entail an unreasonable loss of flexibility in the programs. It suggests that a needs-based formula for distribution would be more effective than the current funding mechanisms.

CEO also argues for funding relating to base load (non-heating) customers. It suggests that their bill increases will be larger, on a percentage basis, than those of heating customers. It suggests that base load conservation has been neglected by PP&L. It also suggests that existing programs involve discrimination against low income base load customers, in the design and development of the existing and proposed social programs.

PP&L, at page 114 of its main brief, continues its discussion of this topic with detailed responses to the litigation positions of OTS and CEO. PP&L argues that there are no hidden costs for hiring. It further argues that its programs seek to promote conservation, load management and economic development. It

views these as an expansion of existing Commission-approved programs. It refers to various statements of policy. It indicates Commission support for a wide variety of these sorts of initiatives. It further argues that these programs will benefit ratepayers. It refers specifically to the regulations at 52 Pa. Code Chapter 58, concerning residential low income usage reduction programs. It indicates benefits relating to peak demand and uncollectible accounts expenses. It further indicates that a strengthening of urban neighborhoods is beneficial. It relates this to customers and to sales base. It further indicates that the Commission should not ignore social benefits which can accrue to PP&L customers and communities.

It states that the Commission has recognized the secondary economic benefits. It further states that these are not "forced" contributions. It indicates that it is seeking only funding for energy-related matters and not programs which it identifies as being funded by PP&L shareholders. It further states that these programs are consistent with emerging competition. It states that expanded customer and community needs considerations are an important part of planning, at this point. It further states that these programs are legal, in the view of PP&L. At pages 120-121, PP&L responds briefly to OCA expressed concerns about lack of an implementation plan. On rebuttal, it did provide more of a plan.

Starting at page 121, PP&L responds to CEO concerns. Of course, the CEO concerns are in the direction opposite from the

expressed OTS concerns. PP&L agrees that the CEO concerns are well-intentioned. It seeks to produce meaningful programs which have a modest impact but is concerned about cost. It would reject the recommendation concerning base load customers. It finds little conservation benefit here. It does mention the compact fluorescent light program. It further indicates some efforts for base load customers relating to conservation. It discusses the problem of public relations and related concerns. It argues against a significant increase in funding. It indicates a commitment to further investigation and possible expansion of programs. It would not go with block grants, at this point. PP&L indicates an open mind concerning the block grant approach.

PP&L continues its responses in its reply brief, commencing at page 51. It first responds to the OTS "forced contribution" argument. PP&L states that it is sympathetic to the general proposition espoused by OTS. However, it maintains that it is not requesting ratepayer funding for the purely social costs of the programs. It refers to various precedents used in the OTS arguments. It indicates that it is not seeking to use rates as a taxing device, to solve socio-economic problems. It indicates legislative support recently expressed for these sorts of initiatives. It states that the Commission has ample authority to permit recovery of conservation, efficiency, load management and rate incentive costs. It also argues that the rates are not unreasonably discriminatory. It characterizes its plans as a

modest program. It suggests general customer benefits from these programs.

CEO seeks more funding for these programs while OTS seeks to have no ratepayer funding increases. CEO also seeks to have various detailed determinations made concerning these programs. I suggest that some of these considerations are beyond the scope of this ratemaking proceeding. However, I agree that some valid considerations have been raised and might be considered in other contexts.

I am reluctant to require a company to do more than it seeks to do concerning these matters. We can easily get to the point where ratepayer funds are being squandered rather than used wisely. This is especially true because some of the theories behind customer benefit from these programs are relatively untried and untested. Accordingly, I am not specifically recommending any of the changes sought by CEO.

I tend to agree with OTS that PP&L might be somewhat pushing the envelope concerning some of these programs. There is a valid suspicion that PP&L is using ratepayer funds, or seeking to use ratepayer funds, to do social good, unrelated to valid utility considerations. However, I am willing to give PP&L the benefit of the doubt. I conclude that it is making valid attempts to modestly strengthen these programs and modestly extend the scope of some programs. I fully appreciate the need for scrutiny but am willing to accept these PP&L initiatives. I recommend no adjustments.

M. Nuclear Decommissioning Costs

This is the first of four major topics which have significant financial impact for ratepayers and PP&L. The four topics are nuclear decommissioning, fossil fuel plant decommissioning, nuclear plant depreciation and fossil fuel plant depreciation. These four topics were addressed in detail by PP&L, OTS, OCA, PPLICA and DOD. In addition, certain other parties are interested in these matters. However, whatever the impact and interest, these are just former expense claims, to which there have been suggested various adjustments.

PP&L's claim for operating expenses includes $30 million as an annual annuity accrual to fund decommissioning for Susquehanna 1 and Susquehanna 2 (PP&L Exhibit Future 1, Sch. D-11). It further gives the accrual method used (main brief, page 124). This involves a four percent annual escalation of cost, a subtraction to produce the sum of money PP&L must still accrue by the time the Susquehanna plants are retired and an after-tax earnings rate of 5.5 percent. PP&L further states that the 1993 decommissioning cost estimate was based on the results of a site-specific study. It also makes reference to its main witness concerning this topic, Mr. Thomas LaGuardia.

PP&L states that there were various adjustments offered to this claim. It then proceeds to discuss the adjustments individually. It addresses removal of non-radiological structures, contingency estimates, the trust fund earnings rate, post-shutdown earnings accruals and amortization in lieu of annuity.

PP&L states that OCA had proposed elimination of the costs of dismantling and removing non-radiological structures. It gives the reasons provided as the fact that the Nuclear Regulatory Commission (NRC) does not require decommissioning of non-radiological facilities and that it is reasonable to assume that the Susquehanna site will not be totally abandoned. PP&L argues that, while NRC regulations do not explicitly require removal of all equipment and structures, the NRC has dictated site restoration as part of the delicensing. However, PP&L argues, much auxiliary work is necessary to ensure radioactive removal.

PP&L further suggests that these facilities would be "unsafe structures" pursuant to the Building Officials and Code Administrators (BOCA) National Building Code. It views the OCA distinction as artificial and unrealistic. It suggests that the Commission has held that non-radiological removal is properly includable in nuclear decommissioning. It provides references and case law. PP&L also addresses re-use of the site.

OTS and OCA contested the contingency provisions proposed by PP&L. PP&L refers to holdings of the Federal Energy Regulatory Commission (FERC) and state commissions which have recognized a contingency factor in nuclear decommissioning cost estimates. PP&L suggests that the purpose of the contingency factor is to allow for the cost of high probability program problems. It bases this statement on what it views as experience. It gives examples. It indicates that these contingencies are well accepted. It refers to use of 25 percent contingency factors by agencies. It also refers

to the experience of Mr. LaGuardia's company. Various examples are given.

Arguments refer to possible advances in technology or alternative methods. PP&L suggests that decommissioning costs will continue to escalate at rates in excess of general inflation. It also discusses license extensions and suggests that this matter would be speculative. It addresses the rejection of a 25 percent contingency factor in the 1985 PP&L proceeding. It draws distinctions to its case here. It cites precedent developed since 1985.

Concerning trust fund earnings, PP&L refers to its investment decisions. It discusses the OCA proposal that an earnings rate of 7.5 percent be used. It also discusses the PPLICA suggestion that the Company's proposed rate of return be used. PP&L argues that there is an interrelationship between its proposed earnings rate on trust fund assets and the projected cost of decommissioning the nuclear plants. In fact, it ties the four percent inflation rate to the 5.5 percent trust fund rate. It also defends its spread of investments. It states that it wants to make sure that sufficient funds are available to decommission the plants, at retirement.

PP&L indicates the view that a cautious and conservative investment strategy is appropriate. It states that funds will be needed over a relatively brief period of time, when decommissioning occurs. It discusses elimination of "black lung" restrictions and the possible expansion of investments. It indicates that changes

do not occur instantly. It also states that it should not be required to guarantee the earnings rate, as suggested by PPLICA.

Starting at page 143, it briefly discusses post-shutdown earnings. PP&L disagrees with the OCA interpretation of the rules of the NRC. PP&L closes with a discussion of Mr. Sivulich's suggestion that the annuity method not be used but that a simple amortization method be substituted. This would produce a decrease in the PP&L claim. It discusses past experience. It suggests that future customers might be burdened by the Sivulich method.

Because several parties have briefed this matter, I will proceed to review their positions entirely and then proceed with a PP&L response, in its reply brief. I will also deal with the proposal by Mr. Epstein which PP&L discusses, commencing at page 66 of its reply brief.

I appreciate the efforts of the various parties but suggest that the many arguments present a coordination problem for the presiding officer and the Commission. I had made some slight attempt to seek coordination by the parties but suggest that, in another similar proceeding, additional attempts be made to coordinate arguments. This would tend to enhance the impacts of the arguments for adjustments and, at the same time, somewhat alleviate problems associated with the review process.

OTS starts its nuclear decommissioning discussion at page 46 of its main brief. It reviews the background and the PP&L testimony. It recommends a total allowance of $18 million rather than the $30 million claimed by PP&L. This produces an adjustment

of $11.7 million. This was based on Mr. LaGuardia's 1993 cost estimate without the $122.8 million in contingencies, inflation factor cost estimate of four percent per year and the tax fund estimated after-tax 5.5 percent per year growth. The OTS position is based on Commission methodology in the previous PP&L rate proceedings.

It quotes language from the 1985 PP&L decision indicating that the contingency factor was too speculative. It refers to a PP&L statement that the cost estimate will be reviewed at two-year intervals and indicates that there can be fine tuning as we go along. It indicates that the accrual method advocated by OTS is different from the annuity method of PP&L because of the addition of an inflation factor in the latter method. It refers to the deficiencies in prior accruals and takes the position that there is no need to make up the deficiency in one year, as was apparently done in the last case. It refers to the remaining life depreciation method and argues that any underrecovery should be recovered over the remaining life of the nuclear units. It also refers to the use of contingencies by PP&L. It further argues that, because of updates every two years, an inflation factor should not be added.

OTS further discusses nuclear decommissioning in its reply brief, commencing at page 14. It provides a brief background and a statement of its position. It drops a footnote referring to rather mixed precedent relating to allowance of a contingency factor. It discusses the basis for contingencies argued in the

last case of PP&L and the record in this case. It also argues against an inflation factor. It refers to the two year updates. It would aim at total cost without adding on factors, which appear to be going only in one direction. It again treats the subject of past deficiencies. It refers to the black lung restrictions, indicating that PP&L has proposed that these be lifted. It closes with a reference to its adjustment.

OCA begins its discussion of this topic at page 163 of its main brief. It provides an introduction relating to nuclear decommissioning. It refers to the PP&L request for a relaxation in the investment standard relating to the decommissioning trust fund. Partly based on this change, it presses for a use of an interest rate of 7.5 percent. It also refers to the total decommissioning cost estimate of $804 million. It refers to the estimate of $127.4 million for decommissioning of nonradiological facilities and equipment at the sites and $106.6 million in contingencies related to radiological decommissioning costs. It would remove these two elements. It adds a reduction associated with recognition of the fact that PP&L will continue to earn interest on its decommissioning funds even while these plants are being decommissioned.

Relating to interest during decommissioning, it refers to testimony indicating that it will take 10 to 12 years to decommission the units. Meanwhile, interest will be earned. It refers to other jurisdictions which have adopted its view. It refers to an NRC requirement that the decommissioning fund be fully

funded at the time of decommissioning (before work is done). It also refers to exceptions. It indicates the view that PP&L could gain an exception to the basic rule.

It next argues about its earnings change. It refers to elimination of the "black lung" restrictions. It refers to rate of return testimony. It views its proposal as not overly aggressive in terms of investment. It refers to an eight percent return on bonds and to 12 percent on equities, implying that PP&L is being overly conservative.

OCA, at page 176, turns to the question of funding for non-radiological decommissioning costs. It refers to decommissioning options. It also refers to the Pennsylvania precedent (mainly based on the old Penn Sheraton case) which provides for net negative salvage when a plant is decommissioned rather than accrual of costs over the life of the plant. It views the nuclear exception as limited and would construe it narrowly. It indicates that the previous PP&L decisions concerning the nuclear plants did not include non-radiological decommissioning. It acknowledges that this was allowed in a Penn Power case in 1987. It would distinguish this decision. It also refers to a recent Illinois decision indicating an expectation that a utility will re-use old structures.

OCA finds no pressing safety concern in the non-radiological portion of decommissioning, as presented by PP&L. It indicates that there are no NRC requirements for funding of non-radiological decommissioning. It refers to the BOCA Code and

would not find the hazard required to invoke this code. OCA further argues that PP&L has not yet determined its long range plans for the Susquehanna site. It suggests a continuing use of the site, including use of some facilities. It refers further to NRC involvement, or lack of involvement, concerning non-radiological matters. It further refers to testimony indicating the view that PP&L will not totally abandon the site and might well continue to use it. It again refers to the allowance of net negative salvage.

OCA closes with an argument for removal of the contingency factor. It drops a footnote relating to both radiological and non-radiological contingencies. It refers to the previous two PP&L rate decisions. It refers to experience gained, indicating possible cost reductions. It also refers to periodic updates of cost estimates.

Essentially, it would wait and capture costs as things become more clear. It indicates a lack of experience with decommissioning, generally, and would follow the previous PP&L precedents of this Commission. It reviews its positions and conclusions at page 194, at the end of the first volume of its main brief.

OCA starts its reply brief discussion of nuclear decommissioning at page 76. It discusses non-radiological decommissioning, contingencies, the trust fund earnings rate and post-shutdown interest earnings. In its introduction it reviews the basic numbers involved. It argues that non-radiological

decommissioning has no mandate in federal or state regulations requiring decommissioning. It also argues that the public safety concern is different for non-radiological structures. It further states that safety problems would occur only if PP&L abandons the site. It presents the differences of opinion relating to NRC requirements of non-radiological work. It states that it is seeking to remove only costs related solely to non-radiological decommissioning. It further discusses the BOCA Code.

OCA indicates that PP&L goes very far in removal of structures and asks that the Commission reevaluate its policy of including non-radiological decommissioning costs in the estimates. It reviews the Commission precedent concerning this topic. It again refers to a recent Illinois decision.

At page 81, it turns to contingencies. It refers to testimony by OCA witnesses supporting elimination of the contingency factor. It refers to PP&L testimony relating to the reasonableness of the contingency factor. It indicates that this is based on limited experience. It refers specifically to uncertainty about low-level radioactive waste disposal costs. It further refers, again, to the two year updates proposed by PP&L, concerned decommissioning costs. The fundamental OCA argument appears to be that uncertainty should not just go in the direction of increasing the funding. It makes further references to Commission precedent relating to PP&L and other electric utilities.

It next discusses the proposed trust fund earnings change from 5.5 percent to 7.5 percent. It would not view its 7.5 percent

as representing an aggressive investment strategy. It refers to a conservative 30 percent equity allocation in the earnings analysis of its witness. OCA further argues for inclusion of post-shutdown interest earnings. It states the PP&L position that the OCA witness was simply wrong in testimony concerning the NRC requirement that the fund be full at decommissioning (which, I assume, is defined as the beginning of dismantling, essentially). This is also defined as the time of license termination. OCA refers to exceptions the NRC has granted on a case by case basis. It also points out that the NRC regulations only address radiological decommissioning requirements.

The PPLICA discussion of nuclear decommissioning commences at page 42 of its main brief. It opens by stating that the PP&L revenue requirement proposal includes a request to increase the allowed annual decommissioning accrual for the Susquehanna units by more than four times the previous level, resulting in an increase in revenue requirement of nearly $20 million. It further reviews various numbers involved. It states that the 5.5 percent rate of return assumption is well below the return the Company claims on its own rate base. It indicates a need to increase this estimate. It suggests a rate of return equal to that requested by the Company, 10.23 percent.

PPLICA continues the argument in its reply brief, commencing at page 34. It again focuses on the estimated return. It refers to the Company connection between the 5.5 percent return and the 4 percent inflation estimate. It again refers to the

return claimed by PP&L on its rate base. It indicates a similarity of control concerning these two earnings rates.

DOD addresses this matter in its main brief, commencing at page 13. It reviews some of the basic numbers. DOD recommends that the Commission continue its current allowance for PP&L, on this topic. It refers to the testimony of its own witness and various other witnesses. It refers to non-nuclear decontamination and to the possibility of a life extension at the plant. Its witness recommended disallowance of the proposed increase.

Mr. Epstein also addressed nuclear issues. In his main brief, at page 1, he states that he has focused on the cost and feasibility of nuclear decommissioning and radioactive waste management. His brief is subject to a motion to strike which will be discussed below. However, some discussion of his brief is pertinent at this point.

Mr. Epstein points out that nuclear decommissioning is fraught with huge uncertainties. He states that it is grossly unfair to request ratepayers to provide a financial safety net for PP&L's risky nuclear investment strategy. He would have much of the decommissioning cost borne by the PP&L shareholder.

At page 2 he commences a specific discussion of cost estimates for radiological decommissioning. He indicates that there is wide fluctuation occurring. He attributes this to a lack of prior decommissioning activity for nuclear plants. He provides details. He refers to the increase in decommissioning cost estimates. He indicates an increase of 553 percent since 1981

(see page 5). He also refers to a relationship between PP&L and the minority shareholder of the Susquehanna plant, the Allegheny Electric Cooperative (AEC). He states that AEC is scheduled to contribute 10 percent of the cost of decommissioning. He further suggests that AEC is not providing for its share. It criticizes PP&L for this situation. Details are provided. It points out that AEC is not regulated by this Commission.

Mr. Epstein also indicates the view that cost estimates for non-radiological decommissioning are not mandated by the NRC. Starting at page 10, Mr. Epstein indicates doubt that the Susquehanna plants will operate for the predicted 40 years. He also proceeds to discuss various associated problems. Starting at page 24 of his main brief, Mr. Epstein presents an argument for the proposition that nuclear decommissioning costs are speculative and should not be imposed on ratepayers.

Mr. Epstein also presents an argument, commencing at page 30 of his main brief. He indicates concern about the "back-end" of nuclear power production, nuclear waste disposal and decommissioning. He provides a formula for decommissioning costs. He would also have the shareholder pay for decommissioning if Susquehanna shuts down prematurely. In his conclusion, he expresses concern about the "intergenerational" problem, relating to what ratepayers will pay for decommissioning. He indicates particular concern for protecting future ratepayers.

PP&L commences its reply brief discussion of this matter at page 55. It refers to the main briefs of OTS, OCA and PPLICA

and to the five major adjustments proposed by their witnesses. PP&L states that its arguments were provided in its main brief but it proceeds to provide further discussion. PP&L also observes that Mr. Epstein has filed a brief in which he proposes disallowance of a substantial portion of PP&L's nuclear decommissioning expense claim.

PP&L argues that Mr. Epstein is attempting to introduce a new issue at the briefing stage, indicating that the Commission disfavors this practice. The PP&L discussion of Mr. Epstein's proposal commences at page 66 of its reply brief. PP&L, at pages 55-57, proceeds to compare the experience of its principal witness concerning this matter with the experience of the principal witness of OCA. PP&L indicates the view that its witness has had more experience with the matter while the OCA witness tended to rely on secondary sources. PP&L then proceeds to discuss the five major issues and Mr. Epstein's proposal.

PP&L points out that OCA is the only party that was disputing the claim for non-radiological structures. PP&L refers to Commission precedent to support its position. It contrasts the Illinois situation referred to by OCA. PP&L indicates that its cost estimates do not include structures which are suitable for re-use. It refers to the old Penn Sheraton precedent.

PP&L next deals with the contingency factor and discusses a reliance of the other parties on the previous PP&L rate proceedings relating to Susquehanna. It indicates that other jurisdictions have approved use of a contingency factor. It refers

again to the Illinois references by OCA. It indicates a rejection based on the specific circumstances there. PP&L provides further details, especially relating to uncertainties and low-level waste disposal.

PP&L observes that the OCA and PPLICA would increase the estimate for return on the fund. It contrasts the return expected, or sought, by PP&L on its own rate base. PP&L touches on the problem of getting a proper distribution of assets and indicates that the increase in the equity share will have to be gradual. It closes with an emphasis on the relationship between the inflation calculation and the earnings rate used in the annuity calculation. It indicates that the 5.5 percent and the 4 percent are linked and that any significant increase in the 4 percent inflation estimate would have a significant impact in the final cost total.

PP&L also addresses post-shutdown earnings. It refers to the NRC rule requiring full funding as of the time a nuclear unit is retired. It refers to OCA arguments concerning exemptions from this requirement. PP&L indicates that, according to its witness, no blanket exemption has ever been given. PP&L also suggests that an exemption might be given where a nuclear unit is retired prematurely. PP&L further discusses the OTS proposal that amortization be used in lieu of an annuity. It points to differences it perceives in the Commission action for the last PP&L case and the proposal now by OTS. It suggests modifications to the OTS method, if it is employed. It further states that the OTS method implicitly assumes that earnings will take care of future

escalation in the cost of decommissioning. It indicates that the OTS suggestion would tend to load costs on future customers.

Concerning Mr. Epstein's main brief, PP&L first indicates that much of the brief is based on documents which are not strictly of record. I tend to agree. I am allowing the brief as a brief, with caution that references are not all to record evidence. I am not accepting the references in the brief as evidence because such an acceptance would be unfair and would be contrary to normal practice. To some degree, Mr. Epstein has written a law review article for his main brief and I am accepting it as such. It is correct that notice could be taken of some of his references but the main brief is too late for notice to be asked, under the circumstances. The Commission does notice various events and facts after the record was generally closed but these references are rather limited and normally there is no need for response concerning these references. I tend to agree with PP&L that it should have been afforded an opportunity to respond to some of these factual references, as part of the record development of this case.

PP&L outlines its view of the Epstein arguments at page 66. It then responds. It also discusses the problem of factual introduction in the main brief. It asserts that Mr. Epstein is essentially attacking the basic prudence of PP&L's decision to construct the Susquehanna plants. He characterizes his review, among other things, as Monday-morning quarterbacking. It next addresses license life for the plants. Mr. Epstein discussed

various problems and PP&L responds briefly. It also criticizes use of a study.

I am in fundamental agreement with the PP&L approach to decommissioning costs. This is the case partly for reasons which relate to my views concerning allowance for decommissioning cost generally, as will be indicated in my discussion of fossil plant decommissioning. I agree that there is more uncertainty about the cost but, as has been stated in other contexts, would rather be approximately correct than exactly wrong. In my view, especially for a major plant, it is wrong to load the decommissioning on net negative salvage costs at the end of the lifetime of the plant. This imposes costs on people who are not really getting use out of the plant, those who are customers after the plant is decommissioned. This is not a problem for relatively minor pieces of equipment but for a nuclear plant it is a major impact, in the "intergenerational" sense. By "intergenerational" I mean the problem associated with burdening a later generation with costs which should be assigned to an earlier generation.

I understand the rationale of the Penn Sheraton case and am concerned about uncertainty of net negative salvage. However, as a general matter, I would rather have the users pay for decommissioning along with their payments for depreciation of the original plant installed. Essentially, the depreciation curve would end at a negative or positive point, depending on the nature of the salvage (negative or positive). This would spread the cost, an advantage, of salvage over the life of the plant and over the

users who use the plant. However, I digress and will return now to the specific issues presented.

I first deal with one point which is not made extremely explicit in the briefs, maybe largely because there appears to be little opposition to the change requested by PP&L. The request is made explicit in PP&L Statement 1, page 9. There Mr. Hill raises the specific request of PP&L that the Commission eliminate the "black lung" restrictions on the type of securities in which PP&L can invest its nuclear decommissioning reserve fund. Mr. Hill goes on to suggest use of ERISA standards. He further states that, if this request is granted, PP&L would expect to broaden the scope of investments in this fund.

I find little or no opposition to this request and recommend that the request be granted. I further recommend that the ERISA standards be imposed, as suggested by the PP&L witness.

I state first my fundamental view that this topic of decommissioning is fraught with uncertainty. I do recall that this matter came up in the last PP&L general rate increase proceeding back in 1985 and I did address the matter briefly there. It was a less complicated situation, as presented in that proceeding. In my Recommended Decision in that proceeding, at page 36, I commenced the discussion of decommissioning with the reference to staff opposition to a 25 percent contingency factor.

In that decision, I indicated the view that engineers employ safety factors but that a good estimate in this situation could be high or low. I accepted the staff adjustment because we

wanted to aim for the target, for now, and leave corrections for later. I also note that I touched on a tax problem which might no longer be a problem. We are much further down the road now and can begin to attempt a more fine tuning of the fund. However, uncertainties are still great.

In accordance with my general views about decommissioning costs, and allocation thereof, I recommend inclusion of the non-radiological structures in the allowance. I reviewed the OCA argument that a strictly "nuclear" exemption to the Penn Sheraton decision might not include this element. However, I would rather err on the side of inclusion and establish a fund which is calculated to completely take care of the site. Of course, this should not include money for work which will not be done. However, I am satisfied that this inclusion by PP&L is reasonable.

I understand PP&L's concern about having enough money available to properly decommission this plant. I also take notice of the Sierra Club argument, commencing at page 10 of its reply brief, that decommissioning expense should be increased, because the Company has been too conservative in providing for funding. This is, essentially, a counter-argument to OCA and the other parties who seek reduction in the accrual.

I tend to agree with the Sierra Club that the basic instinct should be to err on the side of caution and make sure that proper decommissioning and decontamination will occur. However, I recommend that the contingency factor be eliminated. To some degree, this factor is like the safety factor for a bridge, to make

sure that there is not catastrophic failure associated with this undertaking. However, a reasonable provision for money is, right now, all that is necessary. The contingency factor is somewhat speculative and, though I realize that Mr. LaGuardia is being prudent in allowing for it, I would rather not build in what appears to be a "overkill" factor. In any event, I emphasize that we are uncertain about what will actually be the cost when decommissioning occurs.

Having made a recommendation about contingency, I am somewhat influenced by the recommendation in dealing with three remaining issues, trust fund earnings, post-shutdown earnings accrual and amortization in lieu of annuity. On the last topic, I repeat my general statement that I agree with the PP&L approach to this matter. I do not accept the OTS variation which does appear to short-change the fund.

Having eliminated the contingency factor, I feel that I should recommend a cautious approach to the earnings estimate. PP&L could well do better than 5.5 percent. However, the 5.5 percent does seem to tie into the 4 percent escalation factor and be a reasonable, if conservative, approach to estimate total funding available. I expect that this matter will be revisited long before the plant is decommissioned, if that occurs as expected. Adjustments can be made when this re-routing occurs. However, for now, especially with a "black lung" restrictions just being removed, I will recommend retention of the 5.5 percent factor.

Concerning post-shutdown earnings, I appreciate PP&L's concern and its argument that this funding should not be recognized. However, I expect that it will occur. The money which remains unused during the decommissioning operation will be available to provide some return, contributing some money to the total pot. I recommend that reasonable provisions be allowed for post-shutdown earnings and further recommend that this adjustment by OCA be accepted. As the NRC position becomes more clear in the future, perhaps this issue too should be revisited.

Mr. Epstein does not precisely offer a ratemaking adjustment but discusses the matter generally. I have considered his discussion but find no particular response to recommend. In short, I am accepting the PP&L proposal except that I reject the contingency allowance and accept the post-shutdown earning accrual, as recommended by the OCA. On a jurisdictional basis, this results in expense reductions of $2,436,000 for post-shutdown earnings and $2,516,000 for contingencies (OCA main brief, pages 168, 194).

N. Fossil Decommissioning Expense

PP&L commences its discussion of this topic at page 146 of its main brief. It proposes to establish an annuity, similar to the one used for nuclear decommissioning, to recover the cost of dismantling and demolishing its fossil-fired generating plants, following their retirement from service. PP&L drops a footnote indicating that the claim includes 14 units in service and two units that are already deactivated. Two units, at Holtwood, are waiting for the retirement of the last operating units there. The

jurisdictional expense claim is $45 million. PP&L also observes that payments to a fossil decommissioning trust are not deductible for federal income tax purposes.

This estimate was also developed by Mr. LaGuardia. PP&L recognizes that its proposal is a departure from the standard method of dealing with this problem. Absent Commission approval of the proposal, the costs will continue to be recoverable as a form of net negative salvage.

PP&L reviews the background behind net negative salvage. This involves a recovery of cost over five years, after it has been incurred. PP&L states that this method is adequate for relatively small costs but states that, for large units and large amounts of cost, this method would result in an inequitable distribution of cost among different generations of customers. It provides details and examples. It suggests the problem of a rate spike to pay these costs. It also relates this matter to concerns about public health and safety, similar to the concerns expressed in support of this method for nuclear decommissioning. It refers to the BOCA Code. It states that this method of cost accounting will tend to ensure that public health and safety risks are adequately addressed upon retirement of the plant. It makes explicit reference to the similarity to nuclear decommissioning trust funds.

PP&L is aware of Commission precedent, as it relates in its brief. However, it stresses the impact on future customers. It then refers to challenges by other parties, relating to the net negative salvage method and to the earnings rate allowance. PP&L

next addresses the net negative salvage problem in more detail, with reference to the Penn Sheraton precedent. It further stresses its argument that money is needed to avoid problems with health and safety risks, even for fossil fuel plants. It again refers to the inter-generational equity problem. It would rather have the customers using the plant pay for decommissioning, as power is produced. It also indicates that it expects to spend much more on decommissioning in the future than it is spending presently. It suggests that the distribution over the years is inequitable.

PP&L further states that numerous ratemaking allowances are based on long-term assumptions. It further states that the appropriate regulatory response is not to pretend that the underlying obligation does not exist, but to develop the best estimate possible given the current information. It closes with a brief reference to the trust fund earnings rate, indicating that the criticism here is the same as the criticism with respect to the PP&L nuclear decommissioning fund.

OTS addresses this matter in its main brief, starting at page 37. It refers to the net negative salvage precedent and how it works. It then refers to the testimony by the PP&L witness relating to dismantling 16 fossil fuel generating units at five different locations. It reviews technology assumptions, the interest rate (5.4 percent) and the inflation factor (4 percent). It states that PP&L is clearly requesting permission to depart from the Commission's traditional treatment of salvage, by providing for prospective negative salvage of non-nuclear generating plants.

This includes a reference to the Penn Sheraton precedent. Among other things, it refers to the speculative nature of decommissioning cost estimates. It drops a footnote at page 40 concerning estimates or other assumptions used.

OTS refers to the testimony of its witness, Mr. Sivulich. OTS argues that the record in this proceeding demonstrates that PP&L's claim is filled with uncertainty. That uncertainty concerns even the retirement dates for the units. It refers to a 1994 decision of the Commission in a West Penn Power case. It reviews additional testimony provided by PP&L. It would not find the fossil plants to have the same special circumstances as nuclear plants. It would remain with a traditional approach and avoid customer payments for costs which have not actually been incurred.

OTS again addresses this matter in its reply brief, commencing at page 4. It emphasizes the established policy associated with this matter. It indicates that present customers are already paying for removal of past facilities, at least in principle. It provides details of its argument. It also suggests that some of these calculations include inflation and contingency factors which the OTS witness has testified should be removed from the claim. It characterizes the PP&L projections as unrealistic. It refers to Commission precedent and to Penn Sheraton. It would distinguish the special treatment of nuclear plants. It stresses the speculative nature of at least part of these estimates. It states that it is using "speculative" as that term was used in Penn

Sheraton. It states that PP&L has simply failed to demonstrate that the change in policy is warranted.

OCA addresses this topic in its main brief, commencing at page 97. It states that this proposal is similar to the accepted method for nuclear decommissioning expense. It characterizes the Company claim as one for prospective net negative salvage. It then provides extensive references to the Penn Sheraton precedent. It also refers to Commission decisions of two West Penn Power cases. It refers to the various PP&L arguments and submits that these costs are based on projections which are speculative and uncertain. It also stresses the departure involved from precedent. It would deny the entire proposal.

OCA addresses this matter in its reply brief, starting at page 45. It stresses the speculative nature of the projections and again refers to Penn Sheraton. It suggests a possibility of plant life extensions.

PPLICA discusses this matter in its main brief, commencing at page 34. It opens by characterizing this as inflating the revenue requirement. As do other parties, it refers to the claim as prospective negative net salvage. It would similarly reject the Company proposal. It refers to Penn Sheraton. It distinguishes the Commission's allowance of a decommissioning expense relating to nuclear plants. It also refers to the West Penn Power cases. It refers to legal problems and the lack of a mandate for this sort of program. It also refers to the interest rate associated with this proposal.

PPLICA addresses this matter in its reply brief, commencing at page 36. It emphasizes the departure from precedent. It suggests that PP&L seeks to guarantee upfront recovery of anticipated future costs, indicating a desire to avoid problems associated with the onset of deregulation. It further states that PP&L must ensure the public health and safety, no matter how the money is obtained. It would adhere to precedent.

DOD briefly addresses this matter, starting at page 12 of its main brief. It refers to a number of variables which would affect decommissioning. It refers to the 1994 West Penn Power proceeding. It indicates a desire to adhere to precedent and deny the claim.

PP&L addresses fossil decommissioning expense in its reply brief, starting at page 70. It states that OTS, OCA, PPLICA and DOD have opposed the PP&L proposal. PP&L refers to the precedents of Penn Sheraton and the 1994 West Penn Power decision. It also refers to the argument that PP&L will not be harmed by denial because it will recover these costs after-the-fact through net negative salvage. It refers to the significant health and safety concerns associated with this matter and would, as with nuclear facilities, not find Penn Sheraton to be a bar to the Company claim. It acknowledges the precedent of West Penn Power but would revisit the matter now. It refers to the greater magnitude of expense for PP&L and to the severe impact on future customers that will result if cost recovery is deferred.

PP&L acknowledges that net negative salvage will be a source of funding but stresses the customer impact and inter-generational equity issues. It states that the cost of decommissioning two of PP&L's large coal-fired plants is estimated to be $698 million. With net negative salvage, they would recover this at up to $140 million per year over five years. It would, under its proposal, recover this amount in annual installments of approximately $18 million over the remaining lives of the plants.

I strongly sympathize with PP&L's proposal. There is an element of speculation built into this depreciation method of recovering decommissioning costs but, to my view, the PP&L approach improves upon the present practice. However, I am not so supportive of the PP&L approach as to disregard precedent.

In a somewhat different context, I discuss this matter of net negative salvage and the Penn Sheraton precedent in my Recommended Decision for the last PP&L general rate increase proceeding. At page 40 of that decision I stated that "I would forget Penn Sheraton, an opinion by a very good judge who might have reached a good result in the case but probably made bad law." However, I am concerned about the speculative nature of the PP&L approach (especially for these plants) and feel constrained to recommend denial of the claim.

Adherence to precedent will have a significant (and, I feel, adverse) impact on the "inter-generational" problem. I would rather see an orderly provision for decommissioning cost and again suggest that it is better to be approximately correct than

precisely wrong. I am not much concerned about changing policy now and do not care much about having the present ratepayers, perhaps, pay for past plant decommissioning (by net negative salvage) while they pay for future decommissioning as well. At present, ratepayers do not seem to be paying much on past plants. I would correct the situation now and accrue funds necessary to pay for obvious decommissioning costs in the future.

I suggest that the Commission give this matter a hard look and entertain some thought of movement away from the Penn Sheraton precedent. However, although I feel strongly in principle, I am concerned about various factual details of the PP&L proposal and about departure from precedent generally. I do not recommend departure from precedent and accept the adjustments, eliminating the jurisdictional claim of $45,284,000. I do not reach, therefore, the matter of the return rate, which PP&L puts at 5.5 percent.

O. Depreciation Expense

PP&L proposes three major revisions to its depreciation practices, each of which was challenged at hearing. It views the matter of depreciation generally, starting at page 157 of its main brief. It then addresses each individual matter, of the three major matters proposed. I will treat each of these individually but first set up this heading for discussion of the general discussion provided by PP&L, starting at page 157 of its main brief and at page 72 of its reply brief.

PP&L states that it has claimed an annual depreciation and amortization expense allowance of $320,797,000 based on calculations performed by its witness Mr. Hoch. It refers to the straight-line remaining life method of depreciation and provides some background about its procedures. It then refers to a 1993 service life study and several changes made with respect to life spans of Company property. Some of these changes involve changes in life spans for the fossil fuel generating stations (see page 158).

PP&L also proposes changes, "levelizing", with respect to the modified sinking fund (MSF) depreciation expense for pre-1989 vintage Susquehanna property. It characterizes this proposal as a modification only of timing, not of the amount, of the depreciation to be charged during an approximately three year period.

PP&L also proposes adoption of amortization accounting for certain general property accounts, which consist of numerous small value items. It provides a brief statement referring to this change.

PP&L states that OTS, OCA, PPLICA and DOD had disputed the various claims. In the reply brief, PP&L refers to the opposition of the other parties. PP&L proposes to levelize the MSF depreciation accruals for Susquehanna, to reflect shorter depreciable lives for the older fossil-fired units and to implement amortization accounting for certain general property accounts.

P. Susquehanna Depreciation

PP&L first states that its present modified sinking fund method was used in the two Susquehanna proceedings as a means of moderating rate increases associated with putting those plants into rate base. Under the existing approach, the depreciation expense begins well below the straight-line amount and increases each year until the end of 1998 when (1) annual MSF depreciation expense will substantially exceed the straight-line amount and (2) total accrued depreciation on pre-1989 investment will equal the amount that would have accrued if straight-line depreciation had been used since Susquehanna 1 and Susquehanna 2 were first placed into service. This Susquehanna discussion commences at page 160 of the main brief.

PP&L then states that it is requesting permission to set depreciation expense for pre-1989 Susquehanna investment at a levelized annual total company amount of approximately $173 million. This proposal is calculated to recover the same amount of depreciation that would have been recovered by the MSF method from September 30, 1995 to December 31, 1998. At January 1, 1999, there would be a switch to straight-line depreciation and the annual expense would fall to $102 million.

PP&L agrees to automatically adjust retail rates as of January 1, 1999, to reflect this switch. PP&L states that this proposal will result in a more equitable distribution of depreciation expense during the remaining MSF period. It stresses that only the timing is changed from the existing plan. PP&L

suggests that this method will smooth the transition from MSF to straight-line depreciation. It also suggests that this levelization will serve to avoid more frequent rate filings in the immediate future. PP&L then discusses opposition to this proposal.

PP&L first addresses the OTS position. It refers to four points made by the OTS witness, Mr. Sivulich. It states that two of these points are the same, a continuation of MSF will result in a lower revenue requirement in the present case. PP&L states that this ignores the future consequences. PP&L indicates that it would have to make annual rate filings to actually recover all that is projected. It further states that lack of any mandate for this change is no reason to reject it on its merits.

PP&L next addresses OCA and PPLICA. It responds to arguments about declining rate base and return. It indicates that it will be making further plant investments to counteract the depreciation on the Susquehanna units. It argues that it is not reaching beyond the end of the test year or violating test year concepts. It states that it is proposing to recover equal annual installments and levelize the existing MSF recoveries. It continues its references to the test year and related matters. It would not characterize its change as involving acceleration or premature collection of revenue. It points out that this revenue would have been recovered long before now, if straight-line depreciation had been employed.

The corresponding OTS discussion of Susquehanna depreciation commences at page 62 of its main brief. It refers to

the MSF method. It describes the fundamental mechanism. It states that this proposal would result in a higher level of depreciation expense for this rate proceeding. It refers to the testimony of Mr. Sivulich, stressing the proposition that denial of the PP&L change would result in lower revenue requirements for PP&L customers in this case. It indicates that PP&L would not have to file annual proceedings to collect the amounts contemplated. OTS also indicates that PP&L would not normally file a rate case based solely on the need to change its depreciation rates. OTS would deny the PP&L proposal.

The corresponding OTS reply brief discussion commences at page 29. It outlines the MSF method and the change. It further states that OTS would have PP&L "live up to" the deal it cut in its last base rate case. It would continue along the course which had been set. It reviews the argument relating to need for filing frequent cases.

OTS discusses this matter, commencing at page 122 of its main brief. OCA too reviews the background of this matter. It further states that the change proposed by PP&L would distort the relationship of depreciation accruals to rate base and should, therefore, be denied. It views the proposal as flawed. It refers to return on rate base and depreciation, as related and part of the package. It reviews various numbers relating to comparisons of the different approaches. It suggests that, under the MSF approach, if PP&L were to file a rate case every year, its recovery of capital would be fairly constant. It suggests that the Company could

overrecover under the levelized proposal. It suggests that PP&L would levelize depreciation but not the return on capital investments.

OCA proceeds to discuss the PP&L support for its change. It deals with this suggestion by PP&L that it is making new investment. OCA takes the position that it would be inappropriate to consider the effect of future investment in Susquehanna, in the present depreciation analysis. It points out the $30 million difference involved in the PP&L proposal. It views the Company proposal as a distortion of the relationship between depreciation accruals and rate base. It would deny the change sought by PP&L.

The corresponding OCA reply brief discussion commences at page 54. OCA again introduces the topic and suggests that the Company could overrecover under its proposal. It provides various dollar amounts. OCA argues that the increase in depreciation accruals is almost exactly offset by the decrease in return on rate base, under the MSF approach. OCA refers to its main brief and again suggests that there is an imbalance in the proposed PP&L approach. It would reject this proposal to levelize the depreciation accrual.

PPLICA commences its discussion of this topic at page 40 of its main brief. It refers to the $30.6 million change annually. It describes the change. It provides various reasons for rejection of the PP&L proposal. It states that the proposal reaches beyond the test year, that it does not include the offsetting carrying charge benefit, that concerns about recovery problems are

speculative and that the original MSF proposal was intended to match economic benefits of the plant, over its life cycle, to the ratepayers.

PPLICA states that PP&L should not now be entitled to modify its MSF treatment of the Susquehanna plants, thereby increasing the revenue requirement for ratepayers in this case. It refers to a need for a reduction of the revenue requirement by $19.927 million.

PPLICA addresses this matter in its reply brief, commencing at page 39. It too introduces the topic once again. It stresses the linkage between return on investment and depreciation. It would view the later straight-line depreciation as irrelevant to this discussion. It views the PP&L change as improper. It states that PP&L chose the MSF method and indicates that it should stay with it, as originally projected. It suggests improper acceleration and premature collection of depreciation.

DOD commences its discussion of this topic at page 15 of its main brief. It refers to the prior proceedings and the proposed modification. It points out that its witness recommended disallowance of the change. It refers to testimony on behalf of other parties.

PP&L discusses this matter in its reply brief, commencing at page 73. It states that the various parties have opposed its request to set depreciation expense for pre-1989 Susquehanna investment at a levelized annual amount of $173 million for the period from September 30, 1995 to December 31, 1998. It refers to

its initial brief for various discussions. In response to OTS, it adds that the substance of the OTS argument is that the MSF, as in place, should continue in its present form because it provides a lower revenue requirement in this case.

PP&L points out that as now set up, the MSF will result in annual depreciation expense well above the levelized amount by 1998, before abruptly falling to a straight-line level on January 1, 1999. It argues that its present proposal will smooth the transition from MSF to straight-line depreciation.

In response to OCA, it adds that OCA assumes that utility plant in service will remain static over the next 39 months. PP&L suggests that a reasonable plant growth would prevent overrecovery and that there is a risk of a substantial underrecovery.

In response to PPLICA, PP&L suggests that the straight-line method which it is seeking to use is the normal method. It states that the levelized MSF depreciation it proposes can hardly be regarded as an inappropriate deviation from standard depreciation practice that violates the test year concept.

The PP&L proposal, in this instance, calls for modifications over just the three year period, and an earlier switch to levelized depreciation realization. The PP&L plan does increase depreciation expense of this rate case but, on the whole, I agree with PP&L that it is a good idea.

I understand that various complications can be added to the situation. However, I am in agreement with the final PP&L argument that the straight-line method is essentially the standard

method and that there is no particular reason to require PP&L to remain away from this method. It went to the MSF method for particular reasons associated with the early depreciation of the Susquehanna plants. It now seeks to move over to the standard straight-line method a bit early. It will not disturb the long-range straight-line method it had first contemplated, but merely wants to vary (and improve) the transition period between now and then. I recommend that the PP&L proposal be accepted and that the adjustments be rejected.

Q. Fossil Plant Depreciation

PP&L commences its discussion of this topic at page 167 of its main brief. The matter is basically one of projected plant life, which impacts depreciation rates. PP&L states that its depreciation claims for Sunbury, Martins Creek 1 and 2 and Holtwood reflect a deactivation date of 2003, which results in life spans that are, respectively, 6, 12 and 7 years shorter than those currently being used to depreciate these units. It points out that the proposed life spans are actually somewhat longer than those approved in the Company's last rate proceeding. It states that, in the last case, the deactivation dates used to calculate depreciation expense claims were 1994 for Holtwood, 1995 for Martins Creek 1 and 2 and 2000 for Sunbury.

In 1988, PP&L continues, in conjunction with other changes, the Commission approved PP&L's proposed extension of the depreciable lives of these older fossil-fired units to reflect deactivation dates of 2009 for Holtwood, 2015 for Martins Creek 1

and 2 and 2010 for Sunbury. The Company adds that, when these changes were made in 1988, it could not have foreseen the substantial cost that would be required to comply with the 1990 Clean Air Act Amendments (CAAA). It states that these costs dramatically alter the economics of life extension for the older fossil-fired units. It further states that the projected CAAA compliance costs would almost double the depreciated original cost of these units, as shown by a PP&L witness.

PP&L argues that 2003 is a watershed year because, by that time, it will have to achieve final compliance with stringent nitrogen oxide limitations imposed under Title I of the CAAA and expects to make significant reductions in emissions of "air toxics" as mandated by Title III of the CAAA. PP&L argues that, by the year 2003, it must either have deactivated these older plants or have made significant investments to achieve environmental compliance. It states that operation of these plants beyond 2003 is highly uncertain because of the various factors. At pages 169-170 it outlines these factors, quoting from the testimony of one of its witnesses.

It states that the new dates and the new depreciation calculations are justified because of the uncertainty that these plants will run beyond 2003. PP&L adds that this change is consistent with the concept of having current customers bear prudent costs incurred on their behalf. PP&L suggests that the lack of a change now will result in recovery of these funds from future customers, after deactivation of the plants.

PP&L proceeds to review the arguments of OTS, OCA, PPLICA and DOD. PP&L first addresses the arguments generally and then responds to individual details. It asserts that these changes are not speculative but depend on the intricacies of the CAAA. It states that it has identified real and substantial risks to the continued operation of these older plants beyond 2003. It argues that these changes are in accordance with well-accepted depreciation procedures and that these risks of shutdown by 2003 should not be ignored.

PP&L complains that the opposing parties seem to demand a greater degree of certainty in determining these life spans than is possible for any other property. It indicates that none of these witnesses quarreled with the certainty of the longer depreciable lives established for other generating units and for transmission and distribution facilities. It also argues that the other parties have not given proper weight to the substantial capital additions that would be required in order to make life extensions for these plants.

PP&L views this situation as inequitable. It refers to the reduction of depreciation expense without a recognition of higher capital expense. The capital expense would be borne by future customers, with the benefit of lower depreciation enjoyed by present customers. It characterizes this as mortgaging the future and, with reference to one of its witnesses, states that extended lives of utility facilities should not be used to reduce depreciation expense until the investment necessary to accomplish

the life extension has been reflected in the utility's rate base. It refers to approval of this position in a number of other jurisdictions.

PP&L also points out that the Commission has agreed with the depreciation principle discussed by its witness and applied by Indiana and Texas Commissions. It refers to a York Water proceeding in 1993.

PP&L, at page 175, summarizes its general position and proceeds to address the individual arguments of the other parties. It views the positions of the other witnesses as being based on a misunderstanding of the relevant facts. PP&L argues that it has done analyses to support its position. It refers to its 1994 Annual Resource Planning Report (ARPR). It further discusses the CAAA. It continues with discussions of its investment decisions and refers to the various events which cause changes in projections. It states that it has re-scoped a number of capital projects to eliminate all investment that would exceed the limits indicated by its ongoing realization of the situation. It also refers to assertions that there is an industry trend toward extending lives.

PP&L asserts that a document relied on by Mr. Sivulich for this position actually supports a shorter life span for these old units. It refers to testimony by its witness. It concludes that, for all the reasons it has provided, the deactivation date of 2003 for these plants is reasonable. The change in depreciation expense is derived from this deactivation date.

The OTS discussion of this topic begins at page 55 of its main brief. It refers to statements by PP&L witnesses. It reviews the revisions made to expected lives. It takes the position that these reductions in life expectancy projections are clearly improper. It suggests that the changes were made only to generate a higher revenue requirement in this case. It further states that there are no management plans to retire these units early. It continues with further reasons, at pages 56-57, quoting from the testimony of its witness, Mr. Sivulich.

References are made to such matters as added capital projections and a general program of extending lifetimes. At page 58, OTS makes the obvious point that reducing these life spans will produce a higher revenue requirement in this case. It refers to the CAAA. It suggests that PP&L is basing its decisions on the most "draconian" requirements expected. It further refers to indications that PP&L might be exploring alternatives to the 2003 retirements. It suggests that the changes are not based on known and certain factors.

OTS further suggests that PP&L is not appropriately planning for the future in regard to its utility plant. It indicates that these 2003 retirements are not really expected. It refers to apparent management plans to run its generating plants for as long as is economically viable.

OTS continues this discussion in its reply brief, starting at page 22. It reviews PP&L arguments that 2003 is a watershed year, for various reasons. It responds that PP&L is

asking the Commission to issue a blank check which will enable PP&L to enjoy the additional funding of depreciation until 2003 at which point it will decide the best method to employ in order to comply with the CAAA. It refers to testimony of PP&L witnesses. Some of their statements indicate an uncertainty about retirement plans. OTS further argues that PP&L has exaggerated the cost of compliance with the CAAA. It suggests that there are still several alternatives to consider.

OTS refers to the fundamental burden of proof placed on PP&L relating to every accounting entry questioned during the rate proceeding. It asserts that PP&L has not met this burden of proof.

OTS would regard other changes in depreciation as irrelevant and refers to the changes from longer lifetime expectations to the expectations based on 2003. It would have a definite plan in place before the change is made. It challenges PP&L's views of capital additions made. It refers back to the 1988 depreciation study. Finally, it refers to the question of industry trends about life spans. It suggests that PP&L is engaged in an effort to extend the life spans of its fossil fuel plants. OTS takes the position that the record clearly demonstrates that PP&L has failed to prove its case concerning these changes.

OCA begins its discussion of this matter at page 129 of its main brief. That page has the correct topic heading. It reviews the background. It states that these changes are not supported by the record in this proceeding. It argues that the

currently existing deactivation dates should be used for purposes of depreciation expense in this proceeding.

OCA suggests that circumstances have not changed recently, concerning this issue. It refers to testimony of its witness. It refers to a five-year coal upgrade plan of May, 1994. It further argues that PP&L does not plan to retire these units until 2013. It continues with references to testimony. It complains that PP&L has failed to provide any sound engineering or economic analysis supporting these changes. It continues its references to testimony and documents. It questions various cost estimates and other arguments presented by PP&L. It refers to various dates for deactivation which have been provided. It points out that PP&L is not offering a document displaying an economic or engineering analysis in support of 2003. It states that, for all the reasons provided, this change should be denied.

OCA continues its discussion at page 57 of its reply brief. It states that PP&L has proposed to accelerate depreciation for seven of its fossil-fired generating units. It further states that the Company has no plans to actually retire the units in 2003. It argues that this is only a possibility. It again refers to various documents and to testimony. It refers also to its main brief. It indicates the view that PP&L has not provided sufficient analysis concerning this change. It again refers to the 1994 coal upgrade plan.

It refers specifically to the York Water proceeding which had been referenced by PP&L in its main brief. It points out that,

in this instance, OCA is not proposing to add any years onto service lives of generating units. OCA further points out that it is PP&L which is proposing to shorten the lives which had been approved by the Commission in 1988. It would put the analysis burden on PP&L.

PPLICA discusses this matter in its main brief, starting at page 38. It introduces the topic. It refers to testimony of PP&L witnesses and argues that PP&L has no plan to retire any steam electric system during the next 20 years. Its argument indicates that the burden of proof is a major problem for PP&L. It refers to a West Penn precedent. It indicates the view that PP&L has no current intent to actually retire these plants in 2003. It refers to possible upgrades. It further states that PP&L has not committed to the earlier retirement indicated in its depreciation analysis.

PPLICA continues its arguments at page 41 of its reply brief. It would find no economic basis for this change. It further asserts that the clear weight of the record is against PP&L on this topic. It refers to PP&L filings with the Commission. It states that the reduction in depreciable lives should not be recognized for the purpose of depreciation.

DOD addresses this matter, starting at page 14 of its main brief. It refers to units and the background. It indicates an admission that PP&L had no immediate plans to retire these valuable power plants. It refers to the testimony of its own witness. It refers to the many uncertainties associated with the

choice of 2003. It refers to a "known and measurable" standard. It also refers to testimony of other witnesses.

PP&L commences its reply brief discussion of this matter at page 75. It refers to the arguments of the other parties. It also refers to the arguments in its main brief. It then proceeds to address the arguments under three headings: Retirement "Plan", Changed Circumstances Since May 1994 and Studies and Analyses. It complains that the parties have not pointed out what sort of plan is required of PP&L. It further points out that the lack of a plan applies to various other dates for various other pieces of equipment. It points out that the future holds many possibilities. It indicates that these plans are changing and that PP&L is seeking to respond to circumstances as it understands them.

It refers to the 1994 ARPR. It points out that a great deal has changed since the report was filed in 1994. It refers to the nitrogen oxide standards and the CAAA. It complains that the other parties request an unreasonable amount in the engineering studies and analysis. It argues that their criticisms were not specific. Finally, PP&L refers to the investment required to extend the lives beyond 2003.

It again makes the fundamental point that depreciation changes should be tied to investment changes. It would coordinate extended lives, which are associated with future investments, with that future investment. Essentially, PP&L argues that we should not use lifetimes extended beyond 2003. It would advocate longer

lifetimes, for depreciation purposes, only after recognition has been given to the associated investments.

This last PP&L argument, which essentially repeats an argument presented in its main brief, is fundamental to my response concerning this issue. PP&L argues that the current depreciation charge should be coordinated with future investments. The reference is to investments which are necessary to extend the lives of these plants out to the years now used for their decommissioning.

PP&L is correct, in principle, but I feel it is wrong in this particular circumstance. If we were dealing with an extension of their lifetime, PP&L will be in a better position to present its argument. Then the argument would be that 2003 should remain the expected lifetime until the investment is made which is necessary to extend the life to these plants. This would, perhaps, be a proper coordination of capital investment and depreciation. However, the lifetimes are now set to be longer. These longer lifetimes may depend on further investment but, in any case, longer lifetimes are the status quo. PP&L is seeking to change that status quo. Moreover, PP&L does have some fundamental burden of proof beyond the burdens associated with the other parties. In addition, we cannot now know the exact investment required for these plants, if their lives are to be extended beyond 2003.

I appreciate PP&L's concern about the CAAA amendments and about burdens on future ratepayers. If depreciation is not changed now there could be an unfair burden placed on ratepayers of PP&L

early in the next century. I do not get into a comparison of costs assigned to present and future ratepayers. However, under the circumstances, I feel constrained to recommend that the PP&L revisions be denied and the adjustments be allowed. If I were certain, or relatively certain, about 2003 I might agree with PP&L. However, uncertainty concerning the various factors works against PP&L.

I appreciate PP&L's difficulty and I am not reaching my result because of the frequent changes which have occurred over the years. Electric companies are facing a lot of uncertainty these days and many changes in legislation. PP&L might be right that 2003 is a good date. I reach my result largely because I am not sufficiently convinced that PP&L is right. In this instance, uncertainty works against PP&L and I feel that this is proper. I view this issue as involving a difficult call but I call it against PP&L.

We do not know what the future will hold and it might hold additional capital investment for these plants. It might also hold deactivation in 2003. We should not anticipate the investment (my position is unlike my net negative salvage position) but, on the other hand, I agree with the other parties that it is not appropriate to anticipate the deactivation by 2003. My guess is that the lives of these plants will be extended beyond 2003 and that there will be investments made to work these extensions. Unfortunately for PP&L, we should not recognize these capital investments now. Whatever the detailed reasoning, my

recommendation maintains the status quo about the projected lifetimes of these plants. It also rejects the PP&L claim in this case. I pick the OTS adjustment. The dollar amounts of the adjustments proposed by the OCA and OTS are nearly identical. For the Tables attached to this Recommended Decision, I will use the OCA's adjustment of $15,274,000 (OCA main brief, Sch. TSC-20) and the related deferred tax adjustment at 35 percent.

R. General Plant Amortization Accounting

PP&L addresses this matter in its main brief, commencing at page 180. It proposes to adopt amortization accounting for those plant accounts in which it records certain general plant, such as office furniture, general tools and equipment. It indicates that these items are only a small part of total investment in plant and service.

These are relatively low cost items and PP&L wants to avoid recordkeeping detail by going with amortization accounting. It further states that the Commission has approved this method recently for West Penn and UGI. Only OCA opposes this change from depreciation accounting. Even OCA does not oppose the PP&L suggestion that a change to the amortization method be made. OCA does oppose the amount of the expense in this case, and provides details relating to its opposition.

PP&L states that it is using the same procedures as were employed by West Penn and UGI. It points out that OCA disagrees only with implementation details. One disagreement is with amortization periods that have been selected. PP&L first addresses

implementation. It would reject the "whole life" proposal of the OCA witness. It looks to the precedent of West Penn and UGI and provides further arguments. PP&L also opposes the going-forward recommendation of the OCA witness. It reasons that this would defeat the basic purpose of the change, the reduction of recordkeeping expense. Under this OCA method PP&L would still have to keep up the records on all existing plant.

PP&L then turns to the amortization periods, which OCA would lengthen. PP&L refers to engineering judgment and practical understanding of how property is used. It defends its amortization periods as reasonable and properly reflective of the various factors associated with remaining life accounting.

OCA addresses this matter in its main brief, commencing at page 139. It first expresses agreement with the PP&L point that OCA does not oppose the suggestion generally but does oppose the amount of the expense. It views eight of the periods as unreasonably short. It suggests that the analysis performed by PP&L points to longer amortization periods for these accounts. It further asserts that PP&L has not provided evidence to support the amortization periods it has used. It refers to service lives of the plant involved.

It states that, for these eight categories, the PP&L periods are shorter than the service lives in its 1980 service life study, which was used as a basis for existing base rates. It refers to PP&L testimony that this study is outdated, being more than five years old. It points out, however, that there is no more

recent study except for one conducted in 1988. It stresses the lack of evidence supporting the results. It refers to discovery information it received from PP&L. It points out that, under the Company proposal, PP&L would collect more in rates than it would have collected under the existing depreciation method. It illustrates the differences involved.

It refers to PP&L rebuttal testimony about age distribution of the property. It again complains about a lack of data. It refers to Company rejoinder indicating that it plans to fully depreciate any plant which is older than the amortization period selected by the Company. OCA indicates that this will increase the level of expense included in the test year. It concludes that this change overstates PP&L's depreciation expense. It again complains about a lack of evidence.

OCA, commencing at page 60 of its reply brief, continues its arguments. It states that the West Penn and UGI precedents do not pertain to specific implementation methods chosen by PP&L. It repeats that it has no opposition to the basic change to amortization accounting. It drops a footnote that it has not made any specific adjustment related to the PP&L statement that older plant will be treated as retired. It again refers to the eight categories out of the ten. It defends its amortization periods as more reasonable than those of PP&L. It refers to its witness's testimony. OCA indicates that the whole life argument is inapplicable to this situation. It emphasizes the problem about amortization periods. It again refers to testimony of its witness.

PP&L addresses this matter in its reply brief, commencing at page 80. It refers to arguments in its main brief. It then makes three points. It first re-states its claim and varies some of the OCA numbers. It then states that no expense is added by fully depreciating older items. It further states that this actually reduces depreciation/amortization expense. It views this step as routine in this situation. It further points out that the OCA proposal involves more than different amortization periods but involves differences in implementation as well. It indicates that this detail emerged late in litigation and that the approach of the OCA witness was unorthodox.

I agree with PP&L, largely for reasons provided at pages 183-184 of its main brief. There PP&L points out, at least in part, the basis for the OCA amortization periods. It also states that its witness had prepared a retirement rate analysis in 1994. It further states that its witness applied engineering judgment and a practical understanding of how PP&L uses its property.

Considering the situation, I find reasonable factual support for the PP&L claim. Moreover, I do not find a very coherent basis for the OCA alternative. This is not a major item but we should seek to reach the best result available. In this instance, I conclude that the best result is the PP&L proposal. It is supported by its witnesses and information in the record. I recommend no adjustment.

VI. TAXES

OCA addresses five topics within this general heading. PP&L appears to respond only on three of these five topics. Other parties do not address taxes specifically. I will proceed to review the five OCA arguments and the PP&L responses.

A. Gross Receipts Tax

OCA observes (page 196, main brief) that its witness reduced gross receipts taxes by $745,000 to recognize that revenues which are not received (uncollectibles) are not subject to the tax. It states that the PP&L criticism is without merit. It observes that PP&L does not dispute that uncollectibles are not subject to gross receipts tax. It states that the situation is already being addressed through the PP&L claim for recovery of uncollectibles. OCA further argues that the Commission adopted a similar adjustment in a West Penn case.

PP&L addresses this matter in its main brief, commencing at page 194. It states that the OCA adjustment is inappropriate. It reviews the OCA argument that PP&L is compensated for uncollectibles through an expense allowance. PP&L states that OCA is wrong for two reasons. The first is that the issue is revenues, not expenses. It indicates that lack of earnings is no basis for further reducing the revenue by disallowing the tax. The second PP&L argument is that it did not claim any additional uncollectible accounts expense associated with the revenue increase requested in this proceeding. It indicates that this should be an offset against the OCA adjustment. It further states that it is not aware

of any proceeding in which the Commission has approved this sort of adjustment.

OCA further addresses this matter, commencing at page 91 of its reply brief. It again refers to revenues not received. It states that PP&L is already seeking to recover any deficiency in its revenue due to uncollectibles from ratepayers, in its uncollectibles claim. It also addresses the PP&L argument about an offset and argues that this is not an excuse to deny the uncollectibles adjustment. I agree. OCA refers to the West Penn precedent.

PP&L again addresses gross receipts tax in its reply brief, starting at page 85. It refers to its main brief. It views the West Penn precedent as the only case in which the recommendation of OCA has been adopted and indicates that the matter was not seriously contested there. It continues to view the adjustment as unwarranted.

In this instance, I am not quite clear about the exact arguments being presented. However, I fundamentally agree with OCA. If there is no revenue, then there should be no tax and if there is compensating uncollectibles revenue, the tax could be included. What I am not clear on is whether the Company claim for recovery of uncollectibles includes recovery of the gross receipts tax which would have been included if the revenue had been collected. What I am saying is that the revenue necessary to pay gross receipts tax on uncollectibles might be collected another way, making this claim double counting. The gross receipts tax

factor should not be collected twice, once by imputing the revenue as if it had been collected and again by collecting the tax on the provision for uncollectibles. Given the uncertainty, I conclude that I should allow the OCA adjustment. I recommend that this adjustment be accepted, unless PP&L can show that I am wrong about this problem of double receipt of the tax amount.

B. Consolidated Tax Savings

This is a commonly litigated matter and reference is frequently made to court precedent. OCA (main brief, page 198) sets up the background and does refer to court precedent. It provides the fundamental legal standard involved. This is based on the "actual taxes paid" idea whereby savings associated with tax losses of other companies can be imputed to the utility in question. OCA argues that the Commission has approved the modified effective tax rate method for this calculation. It provides ample precedent concerning the matter. It refers to the testimony of its witness and his calculations. It refers to PP&L rebuttal. It notes the PP&L philosophical trouble with this whole concept but proceeds to address the more factual response by PP&L.

PP&L refers to two mining companies which are no longer in operation. OCA refers to the testimony of its witness, indicating that there will still be tax losses. OCA suggests that losses will continue into the future and that, therefore, an adjustment reducing federal income tax expense by $2,161,000 on a jurisdictional basis is appropriate. OCA also addresses the PP&L argument that ratepayers have already received the tax savings

through the energy cost rate (ECR). OCA views this contention as unsupported by the record. OCA argues that the PP&L witness had only stated that these savings may have occurred because costs which were incurred when the mines were in operation may not have been tax deductible until paid.

PP&L addresses this matter in its main brief, starting at page 186. It reviews the OCA adjustment. It voices its general opposition to this sort of adjustment but recognizes precedent. It then provides three reasons why the adjustment should not be allowed in this instance.

It first argues that ratemaking is forward-looking and that we should examine the period in which new rates will be in effect. It refers back to an early precedent relating to this matter, from 1956. It refers to the differences between temporary effects and ongoing situations. It continues with a view of precedent and emphasizes the prospective nature of this adjustment.

It then states that the OCA adjustment is incorrect because it does not reflect a reasonable estimate for the future. It points out that the vast majority of this adjustment is based on Pennsylvania Mines Corporation and Rushton Mining Company. It further states that these companies are no longer in operation and will not generate any tax losses in the future. It views past tax losses as non-recurring.

PP&L next argues that these companies were never intended to operate at a profit or a loss. It refers to mere timing differences.

Finally, PP&L argues that the benefit has been realized through the ECR. It states that expenses by these companies were recorded on PP&L's books. It states that the deferred credit for taxes would be reflected as a reduction in the cost of coal to PP&L which, in turn, was flowed through to PP&L's customers through the ECR. It asserts that the tax savings identified by the OCA witness have already been passed through to the PP&L customers in the cost of fuel.

The OCA response starts at page 89 of its reply brief. It refers to its main brief. It states that its witness requested prospective tax information about the two mining companies but that PP&L did not provide any information. It indicates that the historic information is the most recent data provided. It also states that these companies show losses for the future test year. It states that PP&L presented no evidence to support its position that losses will not continue into the future.

OCA next responds to the argument related to lack of profit or loss. It argues that PP&L has provided no evidence that ratepayers have received the tax benefits and refers to the burden of proof. OCA concludes with the fundamental argument that PP&L should be required to pass on the tax savings associated with consolidated tax filings.

PP&L addresses this matter, commencing at page 82 of its reply brief. It refers to the main briefs. It then states that it is self-evident that the two mining companies will not continue to incur tax losses or produce taxable revenue on a going forward

basis. It further states that the losses were attributable to timing differences created under the tax laws. It states that such timing differences are not properly considered in establishing rates. It also states that the two mining companies were operated on a non-profit basis. It asserts that OCA has recognized that this should work an exclusion. It drops a footnote referring to Interstate Energy Corporation. Concerning the argument about the ECR, PP&L points to its rebuttal testimony. It states that OCA did not elect to challenge this rebuttal.

I do not find the arguments of the parties to be particularly clear on the various points. However, upon review, I agree with PP&L. This sort of adjustment is obvious but OCA seems to be saying that the adjustment should be made here because it is an obvious adjustment in general. However, I do not agree with the mechanism for making the adjustment.

In this instance, the discontinuance of mining operations would make the future quite unlike the past yet OCA depends on the past for its adjustment. I realize that it argues for lack of information from PP&L but, still, I find no basis for projecting the general situation of the past into the future, at all. Moreover, my understanding is that these two mining companies are essentially captured mines by PP&L and I fundamentally agree with the ECR argument of PP&L.

There might be some basis for a consolidated tax adjustment but I do not find one here. This could be just because I am misunderstanding the OCA arguments but I cannot go with an

argument that I do not understand. I do not see how these past (and unusual) tax losses can be imputed to future rates for PP&L.

C. Additions To Taxable Income

OCA discusses this topic in its main brief, starting at page 203. It states that its witness eliminated three items which the Company included as additions to taxable income, for purposes of calculating future test year income tax expense. It refers to an explanation of its witness concerning these three adjustments. It states that these three eliminations, of the additions to taxable income for ECR/FAC overrecoveries, refueling outage costs and bad debt accruals, reduces income taxes and increases net income by approximately $6 million, on a total Company basis.

OCA refers to PP&L rebuttal about cherry picking individual items. OCA also refers to the PP&L argument that the bad debt claim is not based on actual write-offs. OCA states its witness's response. Part of the PP&L adjustment was accepted. It then discusses uncollectibles. It argues that the record indicates that uncollectibles reflect future test year estimates of write-offs. It states that these items should be eliminated.

PP&L addresses this matter in its main brief, commencing at page 192. It provides the three items in question. It presents its argument about cherry picking. It views the OCA action as arbitrary. It defends its total level as reasonable. It provides an example of a tax/book timing difference. It refers to an OCA agreement about an adjustment offered by PP&L. It provides an additional reason to disregard the bad debt adjustment. It states

that its uncollectible accounts expense claim is based on accruals not the actual level of bad debt write-offs. It would have its own income tax expense claim found to be reasonable.

OCA addresses this matter in its reply brief, commencing at page 92. It refers to its main brief. It asserts that the record supports its adjustments. It states that PP&L does not dispute the accuracy of two of its adjustments. Concerning the third, bad debt accrual, it states that the Company's argument is contradicted by the evidence of record. It would adopt the three items of the adjustment and provides numbers about the final adjustment it offers.

PP&L discusses this topic in its reply brief, commencing at page 84. It again states its "cherry picking" argument. It refers to its illustration of an expense based on a timing difference. It asserts that OCA agrees with this criticism, demonstrating that any adjustment should be based on a complete analysis of all items, not just individual expenses.

I sympathize with PP&L in its concern about unfairness by OCA and "cherry picking". However, these adjustments seem to be correct and PP&L could always have provided counter-adjustments earlier in the proceeding. I accept and recommend the OCA adjustments.

D. Tax Deficiency Accruals

OCA addresses this matter at page 207 of its main brief, and at page 94 of its reply brief. It explains its adjustment and reviews precedent. It further states that PP&L presented no

rebuttal testimony on this topic. It submits that the accruals of potential state and federal income tax deficiencies should be removed. It the reply brief it refers to its main brief and characterizes the claim as speculative. It argues that PP&L is now precluded from presenting any response. I find no PP&L response and accept the adjustment by OCA, to reduce state tax expense by $213,000 and federal income tax expense by $804,000 on a jurisdictional basis.

E. Synchronization Adjustment

OCA addresses this topic, commencing at page 209 of its main brief and at page 95 of its reply brief. It observes that PP&L presented no rebuttal on this subject. It characterizes this as an accepted ratemaking adjustment. It indicates that this adjustment is well supported by precedent. I agree and accept the adjustment. I find no PP&L response.

F. State Income Tax Expense Rate

On June 30, 1995, after the close of the record in this proceeding, legislation was signed which reduced the corporate net income tax rate from 10.99 percent to 9.99 percent, effective January 1, 1995. Because the state income tax expense claimed in this proceeding is based on 10.99 percent (PP&L Exhibit Future 1, Revised, Sch. D19, page 2, Revised), it is noted that PP&L will be required to reflect the lower rate of 9.99 percent in a recomputation of its State Tax Adjustment Surcharge (STAS) filed pursuant to Commission regulations at 52 Pa. Code §69.51, et seq.

VII. RATE OF RETURN

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

> [t]he rate of return is the amount of money a utility earns, over and above operating expenses, depreciation expense and taxes, expressed as a percentage of the legally established net valuation of utility property, the rate base. Included in the 'return' are interest on long-term debt, dividends on preferred stock, and earnings on common stock equity. In other words, the return is that money earned from operations which is available for distribution among the capital. In the case of common stockholders, part of their share may be retained as surplus. The rate-of-return concept merely converts the dollars earned on the rate base into a percentage figure, thus making the item more easily comparable with that in other companies or industries.

(Emphasis in original.)

A public utility, whose facilities and assets have been dedicated to public service, is entitled to an opportunity to earn a fair rate of return on its investment. The standards to be used by the Commission in determining what is a fair rate of return are well established and were set forth more than six decades ago by the United States Supreme Court in Bluefield Water Works and Improvement Co. v. Public Service Commission of West Virginia (Bluefield), 262 U.S. 679, 690-93 (1923):

> Rates which are not sufficient to yield a reasonable return on the value of the property used at the time it is being used to render the service are unjust, unreasonable and confiscatory, and their enforcement deprives the public utility of its property in violation of the Fourteenth Amendment. . . .
>
> . . . .
>
> . . . 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.

These principles have been adopted and applied by Pennsylvania's appellate courts in numerous circumstances. See, e.g., Lower Paxton Township v. Pennsylvania Public Utility Commission, 13 Pa. Commonwealth Ct. 135, 317 A.2d 917 (1974); Riverton Consolidated Water Co. v. Pennsylvania Public Utility Commission, 186 Pa. Superior Ct. 1, 140 A.2d 114 (1958).

As the United States Supreme Court stated in three landmark opinions, the return allowed to investors must be commensurate with the risk assumed. The Bluefield decision requires that the rate of return reflect "a return on the value of the [utility's] property which it employs for the convenience of the public equal to that generally being made at the same time on investments in other business undertakings which are attended by corresponding risk and uncertainties." Id. at 692. The decision in Federal Power Commission v. Hope Natural Gas Co. (Hope), 320 U.S. 591 (1944) states:

> 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 service 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. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.

Id. at 603. In reaffirming its Hope analysis, the United States Supreme Court observed in Duquesne Light Co. v. Barasch (Duquesne Light Co. II), 488 U.S. 299, 314 (1989) that "[o]ne of the elements always relevant to setting the rate under Hope is the return investors expect given the risk of the enterprise."

The determination of a fair rate of return thus requires the review of many factors, including: (1) the earnings which are necessary to assure confidence in the financial integrity of the utility and to maintain its credit standing; (2) the need to pay 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. Lower Paxton Township. Moreover, the Commission's findings must be based upon substantial and competent evidence on the record before it, not upon speculation or hypotheses. Ohio Bell Telephone Co. v. Public Utilities Commission of Ohio, 301 U.S. 292 (1937); Octoraro Water Co. v. Pennsylvania Public Utility Commission, 38 Pa. Commonwealth Ct. 83, 391 A.2d 1129 (1978);

United States Steel Corp. v. Pennsylvania Public Utility Commission, 37 Pa. Commonwealth Ct. 195, 390 A.2d 849 (1978).

Five parties, PP&L, OCA, PPLICA, DOD and OTS, actively contested the rate of return question. This Recommended Decision will not detail each party's position but will contain data sufficient to support the recommended rate of return.

A. Capital Structure

The following table summarizes the capital structure proposals of the parties:

Capital Structure	PP&L[1] %	OCA[2] %	PPLICA[3] %	DOD[4] %	OTS[5] %
Long-Term Debt	46.53	47.56	47.13	46.53	46.53
Preferred Stock	7.59	7.44	7.91	7.59	7.59
Common Equity	45.88	45.00	44.96	45.88	45.88
	100.00	100.00	100.00	100.00	100.00

[1] PP&L main brief, page 200.

[2] OCA main brief, page 213.

[3] PPLICA Statement 8, page 37, Table 4.

[4] DOD main brief, page 10.

[5] OTS main brief, page 109.

PP&L proposes a future test year end pro forma capital structure as of September 30, 1995 (PP&L St. 12, page 2). PP&L contends that the approach used in this proceeding is identical to that approved by the Commission in numerous recent decisions. See, e.g., Pa. P.U.C. v. Pennsylvania-American Water Co., 79 Pa. P.U.C. 25, 80 (1993); Pa. P.U.C. v. Pennsylvania-American Water Co., Docket No. 901652 (December 14, 1990) (Order, page 105). All

elements of the ratemaking formula, i.e., revenues, expenses, rate base and return, have been annualized and normalized to reflect anticipated conditions at the end of the future test year (PP&L St. 3, pages 3-4; Ex. Future 1 - Revised). Rejection of the future test year data for a single item, i.e., capital structure ratios, PPLICA's proposal, if adopted, would create a mismatch between capital structure and all other elements of the ratemaking formula.[1]

Moreover, the principal reason given by Mr. Baudino for utilizing historic test year data was that PP&L had not adequately explained and defended its future test year financing plans. PP&L witness Moul addressed PPLICA's "concerns" concerning the reasonableness of PP&L's future test year end capital ratios (PP&L St. 12R, pages 9-11). PP&L reacting to bond rating agencies comments moved its capital structure toward less debt and higher common equity ratios because of business risk increases.

The OCA capital structure proposals accepts PP&L's future test year capital structure except for a proposed common stock issuance which had not as yet been sold (OCA St. 1, page 13). Most of the elements of a rate case are based, at least in part, on projections, including revenues, expenses, rate base, proposed capital structure and capital costs. These projections are based upon the best information available at the time the case is

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[1] In addition, it should be noted that Mr. Baudino has proposed to use PP&L's future test year end embedded cost rates. Those rates are, of course, a function of the very future test year financings that Mr. Baudino would ignore for capital structure purposes.

decided. The use of projections is a standard part of ratemaking. PP&L contends it would be unfair and unreasonable to abandon this standard ratemaking practice for one issue, i.e., the Company's proposed issuance of new common equity.

Evidence demonstrates that PP&L will probably issue common stock in the near future. PP&L states that the issuance of new common equity is necessary. PP&L's current equity ratio is too low compared to other electric utilities (PP&L St. 12-R, pages 11-12. PP&L contends that the bond rating agencies have specifically criticized its equity ratio as being too low (PP&L St. 12-R, page 9). PP&L believes it must issue additional common equity to improve its common equity ratio and avoid a further downgrading of its bonds.

> Additional equity is necessary to respond to the more stringent financial criteria now required by the bond rating agencies. Moreover, the rating agencies have expressed a concern over the Company's high debt use in the past. The Company's financing plan is required to alleviate those concerns and represents a prudent course of action to help prevent further bond downgradings.

(PP&L St. 12-R, page 12). Further, the new equity issuance is part of a two-step financing plan. The first step in this plan involves the repurchase of high-cost debt. This repurchase is virtually complete. The second step of the financing plan, the issuance of new common equity, is now ready to move forward (PP&L St. 12-R, pages 11-12). PP&L indicates that it has already undertaken a number of specific steps to issue the new common equity, including Board of Directors authorization, selection of lead underwriters

and preparation of the SEC Registration Statement (PP&L St. 12-R, page 11).

Although the exact timing of the common equity issuance is not certain, PP&L states that it has a definite need to issue new equity, has a specific plan to do so and has taken specific steps to implement that plan.

PP&L is refinancing high-cost debt and preferred stock. This process has reduced PP&L's cost of senior capital (PP&L St. 1, page 5).

PP&L states that the Commission has recognized that refinancing high-cost debt produces direct benefits to ratepayers and should be encouraged (PP&L St. 12, pages 29-30). See Pa. P.U.C. v. National Fuel Gas Distribution Corp., 73 Pa. P.U.C. 552, 607 (1990). The Commission also has held that a utility should be allowed to fully recover all costs associated with the reacquisition of high-cost debt and that the utility's capital structure and capital costs should not be adversely affected by such reacquisitions. Id. As ALJ Cohen stated in his Recommended Decision (page 154) in the 1990 NFG case:

> In the early 1980s, the Commission sent letters to NFGDC and other utilities, encouraging the utilities to reacquire high cost debt and replace it with lower cost of debt for the purpose of reducing the overall embedded cost of debt to be charged to ratepayers. The letter from the Commission to NFGDC is dated July 24, 1986. The letter provides as follows:
>
> > The Commission is aware that current bond market conditions provide opportunities for utilities to refund outstanding issues of high

> coupon debt. The Commission encourages such refunding if the utility can demonstrate that it is in the public interest. The Commission will favorably consider ratemaking treatment which allows recovery of and a return on the call or tender premium which must be paid to accomplish such transactions if there is a showing that the transactions were prudently undertaken and result in significant and measurable savings to ratepayers (Exh. No. 212-A, Sch. 1).

In order to reacquire high-cost debt and preferred stock, the Company, in most instances, had to pay a premium to existing bondholders and preferred stockholders (PP&L St. 12, page 28). The Company followed standard Commission practice in this proceeding and adjusted both its capital cost rates and capital structure to reflect the effect of these premiums.

The OCA, according to PP&L, recognizes and accepts the change in the cost of debt and preferred stock associated with these refinancings, but opposes any adjustment to capital structure (OCA St. 1, page 14). The OCA proposal would create a mismatch between the establishment of capital cost rates and capital structure.

The premiums paid by the Company to reacquire high-cost debt and preferred stock were financed with newly issued long-term debt[2] The issuance of additional long-term debt to finance the

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[2] OCA witness Kahal assumed that the premiums were paid out of general Company funds and therefore did not affect the Company's capital structure (OCA St. 1A, page 7). This is not the case. Mr. Moul specifically testified that the premiums were paid out of the proceeds of new long-term debt (Tr. 1834-1835).

premiums increased the amount of long-term debt outstanding and obviously affected both the cost of long-term debt and the Company's capital structure. PP&L states that for the OCA to recognize one effect of these refinancings (cost of capital effect) and not the other (capital structure effect) is a mismatch and should be rejected.

Finally, PP&L indicates that the same adjustment proposed by the OCA has been repeatedly rejected in a series of National Fuel Gas rate cases. Pa. P.U.C. v. National Fuel Gas Distribution Corp., 62 Pa. P.U.C. 407, 435 (1986); Pa. P.U.C. v. National Fuel Gas Distribution Corp., 67 Pa. P.U.C. 264, 324-326 (1988). As the Commission has stated:

> We conclude that NFGD has properly accounted for these unamortized refinancing premium costs. The OCA's proposal to include the unamortized refinancing premium costs in the principal amount of debt used in computing the effective debt cost rate is incorrect since the premiums were paid to former debenture owners and therefore are no longer available to the Company. We adopt the recommendation of the ALJ and deny the OCA Exceptions. 67 Pa.P.U.C. at 326.
>
> The OCA would also remove $5 million of tender and call premiums from NFGD's long-term debt to compute its long-term debt ratio and increase its long-term debt cost rate. OCA maintains that NFGD cannot both recover its call and tender premiums through amortization and simultaneously earn a return on its unamortized expense balance. The OCA further maintains that NFGD should only be allowed an amortization of these call and tender premiums (R.D. at 150).
>
> We agree with the Company that our letter to NFGD dated July 24, 1986, makes it clear that the Commission intended to allow full recovery of the Company's expenses and a return on such

> expenses in order to provide an incentive to reduce the embedded cost of debt associates with prudent refinancing to high cost debt. We, therefore, deny the OCA's exceptions to the Company's procedure to recover the costs associated with refinancing high cost debt. Accordingly, we adopt the ALJ's recommendation on the proper capital structure to be allowed NFGD in this proceeding.

OCA adjustment, according to PP&L would create a mismatch between capital structure and senior capital cost rates.

In addition to failing to adjust the Company's capital structure, the OCA, through the testimony of witness Catlin, also proposes a $40 million reduction to PP&L's rate base to reflect deferred taxes associated with the reacquisition premiums (OCA St. 6, page 6). As explained by PP&L witness Moul, this adjustment also should be rejected. First, there is no basis for any rate base adjustment because PP&L has not sought to include the premiums in rate base. If any adjustment were to be made, it should be made to capital structure ratios, not to rate base (PP&L St. 12-R1, pages 1-4). On surrebuttal, OCA witness Kahal agreed (OCA St. 1B, page 9).

The reacquisition premiums were tax deductible at the time they were paid. The issue is how those tax savings should be credited to customers. Under PP&L's method, the tax savings generated by the reacquisition premiums will be flowed through to customers as those customers pay the underlying cost of the premium (PP&L St. 12-R1, pages 1-2). PP&L financed the premiums initially and will recover them from ratepayers over the life of the new debt. PP&L contends that since customers will pay the cost of the

premium over the life of the debt, therefore they should receive the associated tax savings over the same period. Id. To do otherwise, according to PP&L, would create a mismatch between the tax savings and the underlying cost which generated the tax savings. PP&L stated that research has found no case in which the Commission has made any adjustment of the type. Therefore, it should, according to PP&L being rejected.

The OCA contends that it employs PP&L's actual capital structured projections and not the modified capital structure ratios PP&L uses (OCA St. 1, pages 13-17).

OCA witness Kahal explained the modification to PP&L's actual capitalization data as follows:

> Witness Moul's treatment provides the Company both a return of and a return on these expenditures in three ways. First the annual amortization of the losses (net of some minor gains) is added to interest expense. This totals about $7.2 million. Second, the unamortized balance of $115.9 million is subtracted from the long term debt balance when computing the embedded cost of debt. The combination of these two actions increases the embedded cost of debt from 7.40% to 7.97%. Third, Mr. Moul also subtracts the $115.9 million of unamortized losses from the debt balance for capital structure purposes.

(OCA St. 1, pages 13-14).

OCA contends that it is this third adjustment that serves to inflate the equity portion of capital structure and the overall pre-tax rate of return (OCA St. 1, page 14). The OCA states it does not object to PP&L receiving a return of and a return on the call premiums and that cost recovery should take place through rate of return (OCA St. 1, page 14). The OCA does object to PP&L's

adjustment to its actual capital structure to reduce the debt balance by approximately $116 million. The OCA submits that the $115.9 million of unamortized losses should not be subtracted from the debt balance for capital structure purposes.

PP&L's adjustment to the capitalization provides PP&L with approximately $24 million[3] of cost recovery on a total company basis[4] (OCA St. 1, Sch. MIK-1 at 2). OCA witness Kahal states that this adjustment overcharges ratepayers by about $8 million ($24 million minus $16 million) (OCA St. 1, page 16).

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

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[3] As witness Kahal explained, witness Moul calculated his adjustment as follows: First, Mr. Moul shows on his Schedule 14 a pre-tax rate of return of 14.96%. Removing the loss on reacquisition, his pre-tax rate of return declines to 14.56% or a 0.4% reduction. If we assume a $6.0 billion rate base on a total company basis, the revenue requirement cost of Mr. Moul's treatment totals to roughly $24 million (i.e., $6 billion x 0.4%) (OCA St. 1 at 16).

[4] Witness Kahal explained that: For simplicity of exposition, all calculations are total Company, and I assume rate base is equal to capitalization. It is most convenient to present results this way since rate of return (and capital structure) are total Company concepts. Presenting the analysis on a jurisdictional basis would produce smaller numbers but would not affect the concept or comparisons discussed herein (OCA St. 1 at 15).

Company's expenses and a return on such expenses in order to provide an incentive to reduce the embedded cost of debt." Id. page 607.

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

> PP&L shareholders have been able to enjoy many years of savings from these refinancings since PP&L has not had a rate case since 1985. These substantial interest expenses savings due to refinancings undoubtedly increased PP&L's profits and higher profits translate into higher retained earning and thus common equity. Unless one makes the unrealistic assumption that every dollar of profits translates into an additional dollar of common dividends, the refinancings very likely have resulted in a higher per books common equity balance than would exist absent the refinancings.

(OCA St. 1, page 15).

The OCA submits that PP&L should not be given an additional $8 million in incentives for refinancing. The OCA submits that witness Kahal's adjustment provides PP&L with full cost recovery of $16 million, including a debt return on the unamortized balance of call premiums. The OCA contends, therefore, that the Commission's findings in the NFGD decisions should be reconsidered in this proceeding.

PP&L witness Hill testified in response to cross-examination that PP&L does not subtract the $115.9 million from debt balance for financial reporting purposes (Tr. 414). Further, OCA witness Kahal testified:

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

(OCA St. 1, pages 14-15).

Accordingly, because the call premiums are a regulatory asset on the PP&L balance sheet, the common equity balance is unaffected by the refinancings.

In rebuttal, PP&L witness Moul objected to OCA witness Kahal's capital structure adjustment testifying that:

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

(PP&L St. 12R, page 8).

Witness Kahal responded to witness Moul in his surrebuttal testimony, noting that:

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

(OCA St. 1A, page 6).

Moreover, as Kahal explained:

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

(OCA St. 1A, page 7).

The OCA proposes that the Commission should reject PP&L's adjustment to its projected common equity ratio.

The OCA, based upon PP&L's capital structure adjustment, recommends that PP&L's rate base be adjusted to recognize the accumulated deferred income taxes (ADIT) balances associated with the loss on reacquired debt (OCA St. 6, page 6).

OCA witness Kahal explained the basis for this adjustment:

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

> dollar amount of PP&L's original tax savings is returned to ratepayers very gradually over time.

(OCA St. 1B at 6).

In rebuttal, PP&L opposed adoption of OCA's rate base adjustment, but suggested as an alternative that recognizing:

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

(PP&L St. 12R1, Exh. PRM-4).

As shown on that exhibit, recognizing the deferred tax provisions results in the following capital structures:

Type of Capital[1]	Ratios %	Cost Rate %	Weighted Cost %
Long Term Debt	46.96	7.84	3.68
Preferred Stock	7.53	7.31	0.55
Common Equity	45.51	13.00	5.92
Total Capital	100.00		10.15

[1] PP&L St. 12R1, Exh. PRM-4, Sch. 2.[5]

PP&L witness Moul testified that he was not recommending adoption of this revised capital structure since it was his position that the deferred taxes associated with call premiums should be completely disregarded (Tr. 1794-1795).

In surrebuttal, OCA witness Kahal testified that PP&L's alternative which results in a modification to the Company's capital structure was acceptable. The OCA conditioned adoption of this adjustment on the use of PP&L's actual capital structure, not

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

the adjusted capital structure presented witness Moul in this proceeding (OCA St. 1B, pages 1-2). Thus, if the Commission accepts his recommendation to utilize PP&L's actual capital structure, OCA witness stated:

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

(OCA St. 1B, page 9).

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

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

The OCA states that if PP&L adjusted capital structure is used, then rate base must be adjusted to reflect the ADIT associated with the loss on reacquired debt.

The OCA contends that PP&L's proposed handling of this issue results in the shareholders having received the tax savings but ratepayers will only see the tax savings gradually over the next 10 to 15 years. OCA witness Catlin testified that the Company accomplished this by:

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

(OCA St. 6, page 7).

Adoption of the OCA adjustment reduces total PP&L rate base by $47,863,000 and reduces Pennsylvania jurisdictional rate base by $40,838,000 (OCA St. 6, TSC-4).

In rebuttal, PP&L witness Moul argued that the OCA adjustment should be rejected because ratepayers:

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

(PP&L St. 12R1, page 1-3).

PP&L further argues that the OCA adjustment is inappropriate because "there were no customer funds utilized to undertake the call of the Company's high cost debt ..." and that customers will receive the tax benefit through "an interest synchronization technique" (PP&L St. 12R1, pages 1-2). OCA witness

Kahal noted in his surrebuttal testimony that this assertion is only partly true:

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

(OCA St. 1B, page 7).

The OCA submits that PP&L agrees that the deferred taxes exist, the issue is whether the timing difference should be flowed through to ratepayers as is the normal practice for deferred taxes.

PP&L argues against the OCA rate base because it "would give customers the benefit of the tax deduction up front.." (PP&L St. 12R1, pages 2-3). In response, OCA witness Kahal testified:

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

(OCA St. 1B, page 8).

The OCA submits that limiting PP&L's return to the shareholder financed portion is an appropriate ratemaking treatment of these funds.

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

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

(Id. pages 8-9).

Thus, the OCA submits that should Mr. Moul's adjustment be adopted, the OCA's recommended adjustment to rate base should be adopted.

PPLICA's witness Baudino proposes PP&L's actual September 30, 1994 capital structure (PPLICA St. 8, page 37). PPLICA contends that PP&L did not provide evidence supporting its capital structure projection. PPLICA notes that PP&L projects an issuance of common stock during future test year which will raise the common equity ratio by over a 100 basis points (PPLICA St. 8, pages 37-38). PPLICA contends that this alone, other things held constant, could increase PP&L's revenue requirement by about $5 million a year (PPLICA St. 8, page 38; PPLICA St. 9, page 32).

PPLICA states that no PP&L witness testified to the benefits gained from such an increase to common equity (PPLICA St. 8, page 38).

I find that PP&L's capital structure proposal of 57.48 percent long-term debt, 7.59 percent preferred stock and 45.88 percent common equity to best reflect the manner in which PP&L will be financed during the life of the proposed rate increase.

PP&L's testimony that the common stock issuance is the second part of a two part financing plan is reasonable. The repurchase of high cost debt is nearly complete. Further, PP&L has begun the process of issuing new common equity (PP&L St. 12-R, pages 11-12).

The use of projected fixed capital costs as of September 30, 1995 which only reflects in part PP&L's financing plan would create a mismatch of capital costs and capital structure ratios.

Additionally, PP&L contends that the issuance of common stock is necessary because if it does not improve its common equity ratio, its bonds could be downgraded.

Further, the Commission in the past has allowed utilities to adjust their capital structures to allow recovery of the call premium expense through an amortization and to earn a return on that unamortized balance of that expense. Pa. P.U.C. v. National Fuel Gas Distribution Corporation, 67 Pa. PUC 264, 324-326 (1988); Pa. P.U.C. v. National Fuel Gas Distribution Corporation, 73 Pa. PUC 552, 606-607 (1990). I find nothing in the evidence of this

proceeding that would persuade me that the Commission position should be reconsidered.

Finally, I agree with PP&L that it is reasonable to match recovery of the cost of the premiums and the associated tax savings. PP&L would accomplish this by recovering the cost of the premiums over the life of the new debt and by returning the deferred tax savings over the same time.

B. Long-Term Debt Cost

PP&L is claiming a pro forma September 30, 1995 debt cost rate of 7.97 percent (PP&L main brief, pages 200 and 209). The OTS, PPLICA, and DOD accept PP&L's debt cost claim (OTS main brief, page 109; PPLICA St. 8, page 38; and DOD main brief, pages 7 and 10).

The OCA proposes a reduction in PP&L's debt cost claim of 7.97 percent to 7.84 percent to reflect recognition of accumulated deferred income taxes associated with reacquired debt in the cost of debt (OCA St. 1B, page 9).

This recommendation accepts PP&L's debt cost claim of 7.97 percent because it rejects OCA's claim on capital structure. The use of OCA's debt cost would create a mismatch between the capital structure and the debt cost.

C. Preferred Stock Cost

PP&L is claiming a pro forma September 30, 1995 preferred stock cost rate of 7.31 percent. The OCA, OTS, PPLICA and DOD accept PP&L's preferred stock cost claim (OCA St. 1, Sch. MIK-1,

page 1; OTS St. 1, page 14; PPLICA St. 8, page 38; and DOD main brief, pages 7 and 10). This recommendation accepts PP&L's claim.

D. Common Equity

The following table summarizes the common equity methodologies and claims of the parties:

Methodology	PP&L[1] %	OCA[2] %	PPLICA[3] %	DOD[4] %	OTS[5] %
Discounted Cash Flow (DCF)	12.46	11.1	10.85		10.63
Risk Premium (RP)	13.25				
Capital Asset Pricing Model (CAPM)	12.79-13.92				
Comparable Earnings (CE)	13.55				
Recommendation	13.0	11.1	10.85	11.5	10.63

[1] PP&L's DCF cost rate claim of 12.46 percent is adjusted to reflect the ex-dividend price of the stock, .5 percent market factors in the growth rate and next period growth (PP&L St. 12, page 40 and PP&L main brief, pages 218-220). The RP claim of 13.25 percent is found at PP&L Statement 12-R, Schedule 1, page 1. PP&L's CAPM cost range claim is found at PP&L main brief, pages 222-223. PP&L's CE cost claim is found at PP&L main brief, pages 223-224. The 13.0 percent cost of common equity claim is found at PP&L main brief, page 216.

[2] OCA's DCF cost rate of 11.1 percent can be found at OCA Statement 1, pages 21-37, OCA Statement 1A, pages 2-3, Schedules MIK-5, MIK-6 and MIK-7 (May 1995 Updates).

[3] PPLICA's DCF cost rate of 10.85 percent is adjusted for next period growth and can be found at PPLICA Statement 8, pages 23-30, 32, 34-35 and PPLICA main brief, pages 12-16.

[4] DOD's cost of common equity is based upon the cost of common equity in Pennsylvania Public Utility Commission v. West Penn Power Company, Docket No. R-00942986. DOD witness Prisco did not conduct any independent study of current capital markets (DOD main brief, pages 8-9).

[5] OTS' DCF common equity cost rate of 10.63 percent uses projected dividend yields which reflect full year dividend yields on OTS Statement 1, page 28 and OTS main brief, page 123.

In numerous cases, the Commission has determined the cost of common equity primarily by utilizing the DCF method and informed judgment. See Pennsylvania Public Utility Commission v. Philadelphia Suburban Water Co. (Philadelphia Suburban III), 71 Pa. P.U.C. 593, 623-32 (1989); Pennsylvania Public Utility Commission v. Western Pennsylvania Water Co. (Western Pennsylvania Water Co. II), 67 Pa. P.U.C. 529, 559-70 (1988).

Generally, the Commission has criticized the Risk Premium and CAPM methodologies. In rejecting Risk Premium and CAPM analyses, the Commission has explained:

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

Pennsylvania Public Utility Commission v. Pennsylvania Power Co., 67 Pa. P.U.C. 91, 164 (1988) (emphasis in original); see also Pennsylvania Public Utility Commission v. Peoples Natural Gas Co., 69 Pa. P.U.C. 138, 165-168 (1989); Pennsylvania Public Utility

Commission v. Pennsylvania-American Water Co., 68 Pa. P.U.C. 343, 377-378 (1988); Pennsylvania Public Utility Commission v. National Fuel Gas Distribution Corp., 67 Pa. P.U.C. 264, 331-332 (1988); Pennsylvania Public Utility Commission v. York Water Co., 62 Pa. P.U.C. 459 (1986). In Pennsylvania Public Utility Commission v. Duquesne Light Co., 66 Pa. P.U.C. 518 (1988), the Commission declared "that the economic environment over lengthy time frames is not representative of current economic conditions and therefore does not produce realistic risk premium results." Id. at 696.

This recommendation is based primarily on the DCF method and judgment.

PP&L's common stock was publicly traded during this proceeding. At its annual meeting in May, 1995 PP&L's stockholders approved the creation of a holding company. PP&L resources, the holding company, operations are dominated by PP&L electric operations and its common stock is publicly traded. PP&L and two parties used PP&L financial market data as a primary or significant source of data and secondary weight to their respective barometer groups (PP&L main brief, page 217; PPLICA main brief, page 11; and OTS main brief, page 110). The OCA gave primary weight to its barometer group companies and secondary weight to PP&L.

This recommendation will consider the financial market data for PP&L and the barometer groups set forth by the parties. The barometer group data is given slightly less weight because no two utilities are ever complete replications of each other and therefore, no barometer group of companies however well chosen is

ever universally comparable to the subject utility. Understanding this truth, we will consider data for all proposed utility groups. Each of the barometer groups consists of utilities which the sponsoring party argues are as similar to PP&L in terms of risks as it is possible to be. PP&L is not faced by business risks that are not faced by the barometer group companies and as such the risks are reflected in the market price of their stocks. In the world of corporate finance and utility regulation, the existence of risk rate imperfections between a specific utility and a barometer group is inevitable.

The following table summarizes the dividend yield and growth rate recommendations of the parties:

DCF	PP&L[1] %	OCA[2] %	PPLICA[3] %	OTS[4] %
Dividend Yield	8.29	7.50	7.8	7.45
Growth Rate	4.00	3.45	2.8	2.88
Recommendation	12.46	11.1	10.85	10.63

[1] PP&L unadjusted dividend yield is 8.29 percent (unadjusted 8.29 percent x 1.02 next period growth = 8.46 percent) (PP&L Exh. PRM-2, Sch. 1, page 1; PP&L St. 12, page 45).

[2] OCA's unadjusted dividend yield average for its barometer group is 7.5 percent (unadjusted 7.5 x 1.02 = 7.65 percent) (OCA St. 1A, Sch. MIK-5 and Sch. MIK-6; OCA St. 1, page 7). Growth rate of 3.45 calculated (11.1-7.65 = 3.45 percent).

[3] PPLICA's DCF cost rate finding is an average of the mid points of PP&L's data and two barometer groups plus judgment. The unadjusted dividend yield is the average of the mid points for the three groups and the growth is also the average of the mid points for the three groups (PPLICA St. 8, pages 29-30, 32 and 34-36).

[4] The OTS dividend yield is calculated based upon OTS Statement 1, pages 16, 23, 27-28 and 31-33. The adjusted dividend yield of 7.66 percent has been unadjusted by the total growth rate since the adjusted dividend yield is based upon a full year (OTS St. 1, page 28). The unadjusted dividend yield is calculated as

7.44 percent. The OTS 10.63 percent DCF recommendation includes judgment (OTS St. 1, page 15).

The DCF methodologies will not be detailed in the body of this recommendation, but those interested in the detail can PP&L's DCF methodology at PP&L Statement 12, pages 38-39 and Appendix C, OCA's DCF methodology at OCA Statement 1, pages 23-24, PPLICA's DCF methodology at PPLICA Statement 8, pages 18-20, and OTS' DCF methodology at OTS Statement 1, pages 23-24.

PP&L contends that OCA's, PPLICA's and OTS' common equity cost rates are inadequate because of their sole reliance on the DCF method (PP&L main brief, page 225). The central problem with the DCF model according to PP&L witness Moul is:

> The constant growth or "Gordon" form of the DCF model has been used by all rate of return witnesses in this case. It must be recognized that this version of the DCF model is not without its limitations because many of the assumptions which must be made to utilize this model are simply not realistic. According to the theory of the constant growth form of the DCF, future earnings per share, dividends per share, book value per share, and price per share will all appreciate at the same rate absent any change in price-earnings multiple. However, there is no evidence that these conditions actually prevail in the equity market.

(PP&L St. 12-R, pages 14-15).

A further flaw in the DCF method, according to PP&L, is that when applied to an original cost rate base it will understate a utility's cost of capital when the market prices of the stocks used in the analysis substantially exceed their underlying book value (PP&L St. 12, App. C). PP&L contends that for this reason,

several regulatory commissions have openly questioned the reliability of the DCF method given current market fundamentals.

In a recent case the Indiana Utility Regulatory Commission discussed this problem as follows:

> In determining a common equity cost rate, we must again recognize the tendency of the traditional DCF model, relied on heavily by Mr. Bolinger, to understate the cost of common equity. As the Commission stated in Indiana Mich. Power Co. (IURC 8/24/90), Cause No. 38728, 116 PUR4th 1, 17-18, "the unadjusted DCF result is almost always well below what any informed financial analyst would regard as defensible, and therefore requires an upward adjustment based largely on the expert witness's judgment."
>
> * * *
>
> It is recognized that "there are difficulties in making a good DCF calculation whenever a utility's stock sells, for whatever reason, above book value." Niagara Mohawk Power Corp. (NY PSC 2/2/93), 140 PUR4th 481, 491. This phenomenon was also discussed in Whittaker, "The Discounted Cash Flow Methodology: Its Use In Estimating A Utility's Cost of Equity," 12 Energy L.J. 265, 281-282 (1991), where it is stated:
>
> The DCF methodology presumes to produce the "market required" return of equity, that is, the "cost of equity" on the market value -- not the book value -- of a company's stock. Unless the market price of a utility's stock equals its book value, the unmodified application of the market-oriented DCF results to a net original cost (book value) rate base understates the earnings necessary to satisfy the investor-required (expected) return.
>
> Thus, if the traditional DCF model is strictly applied to an original cost rate base, the investor could earn the cost of capital only if the investor paid no more than book value for the stock.

The Iowa Utilities Board reached the same conclusion in Re Interstate Power Co., 152 PUR4th 377, 382-383 (1994):

> The Board generally relies on the DCF model for the initial analysis to determine the cost of equity and uses a risk premium analysis as a check on the validity of the DCF analysis. In Iowa Electric Light and Power Company, Docket No. RPU-89-9, "Final Decision and Order" (October 25, 1990), the Board stated: "[T]he DCF model may understate the return on equity in some circumstances. This is particularly true when the market is volatile and the company in question has a market-to-book ratio in excess of one." Those conditions exist in this case (Ex. 17, Sch. 2, p. 3). The DCF results do not overlap with the risk premium analysis because the DCF model yields extremely low results.
>
> * * *
>
> In this case, the DCF approach underestimates the cost of equity needed to assure capital attraction during this time of market uncertainty and volatility . . . The Board will, therefore, give preference to the risk premium approach . . .

See also Maui Electric Company Ltd., 153 PUR4th 437, 473 (1994) ("we agree with MECO that there is currently a downward bias in the DCF model"); Re Commonwealth Edison Co., 158 PUR4th 458, 520 (1995) ("[T]he presentation made by Messrs. Gorman, Lelash and Kahal lead to determinations which understate Edison's cost of equity; e.g., used by all three intervener witnesses of an annual DCF model, which has been explicitly rejected by this commission.").

PP&L contends that by refusing to consider the use of other equity cost rate models, the opposing party witnesses severely compromised the scope and reliability of their analyses.

This threshold shortcoming was then compounded through the misapplication of the one method on which they chose to rely.

OTS' mechanical application of the DCF model, according to PP&L, produced unreasonable results for both PP&L, and its barometer group companies. OTS' analysis of the Value Line barometer group determined that the cost of equity for its individual companies produced DCF calculations as low as 9.25 percent for a barometer group and 9.4 percent for PP&L while some of the barometer group companies had individual DCF calculations as low as 8.2 percent to 8.5 percent (PP&L St. 12-R, pages 19-20). If one accepts the standard regulatory version of DCF, these results must show the expected cost of common equity. The simple answer, according to PP&L, is that the DCF method cannot be used in isolation and without careful exercise of informed judgment.

Similarly, OCA's proposed DCF growth rate specifically assumed returns on equity in a 12 percent to 12.5 percent range (PP&L St. 12-R, pages 17-18). Mr. Kahal did not explain how PP&L can achieve these anticipated growth rates under his proposed 11.1 percent return on equity.

PPLICA DCF analysis mismatches growth rates (PP&L St. 12-R, page 19).

OCA considers PP&L's common equity cost rate claim to be overstated for five reasons (OCA main brief, pages 251-263).

1. PP&L employs an unsupportable growth rate which includes a 50 basis point adjustment for "non-company specific" market factors;

2. PP&L also adjusts the DCF calculation to reflect an ex-dividend adjustment and quarterly compounding of the dividend;

3. PP&L's use of a RP method consistently rejected by the Commission;

4. PP&L's use of the CAPM method consistently rejected by this Commission; and

5. PP&L's comparable earnings approach should be rejected because its an accounting ratio and not a financial market related ratio.

OTS considers PP&L's common equity cost rate claim to be overstated for four reasons (OTS main brief, pages 127-132).

1. PP&L's use of ex-dividend adjustment;

2. PP&L's 50 basis point adjustment for market factors;

3. PP&L's use of CAPM and RP methods that contend that historical conditions are the same as current conditions; and

4. PP&L's use of comparable earnings method, since it merely computes historical book returns for unregulated companies.

PPLICA considers PP&L's common equity cost rate claim to be overstated for five reasons (PPLICA main brief, pages 17-24).

1. PP&L's DCF growth rate claim is overstated;

2. PP&L's DCF growth rate claim further includes 50 basis point adjustment for market factors;

3. PP&L's use of the comparable earnings approach should be rejected as an accounting based ratio rather than a market based ratio;

4. PP&L's RP should be rejected because its based historical data that has no relevance; and

5. PP&L's CAPM approach should be rejected because this Commission has previously rejected this approach.

It is obvious that no cost of common equity technique is without flaws. The DCF method generally accepted by this Commission is not perfect and is, in fact, flawed. Nevertheless, of all the methods available to determine the cost of common equity, it may be the most accepted. The assumptions of a predictive model do not have to be in perfect harmony with the known world as long as the model predicts the future in a reasonable and accepted manner. An example of this are the economic assumptions of the perfect competitive market model, which are unrealistic in the real world, but are still predictive of real market activity. Therefore, I will employ the DCF method analysis in this recommendation with full knowledge of its various flaws but adjusted to mitigate the effects of those flaws.

This recommendation finds an unadjusted dividend yield of 7.63 percent. The 7.63 percent unadjusted dividend yield is premised upon the dividend yields of OCA, PPLICA and OTS. The range of their dividend yield proposals is 7.45-7.80 percent. This recommendation recommends the mid point or 7.63 percent. I

recommend the dividend yield range proposed by OCA, PPLICA and OTS because it considers and reflects the following;

1. The dividend yields represent longer term trends and short-term trends with the result that the dividend yields are not stale nor are they biased by short-term aberrations;

2. The dividend yields include data for PP&L and groups of barometer companies;

3. The use of three expert witnesses and the mid-point of their proposals would decrease expert witness bias; and

4. The use of the dividend yield range of three expert witnesses would decrease barometer group selection bias.

I did not recommend PP&L's dividend proposal because quarterly compounding and the ex-dividend adjustment.

The 7.63 percent unadjusted dividend yield adjusted for next period growth is 7.75 percent (unadjusted dividend yield of 7.63 percent times half of the growth rate of 3.15 percent equals 7.75 percent).

This recommendation finds a growth rate of 3.15 percent. I do not find the growth rate evidence of any party to be totally persuasive. The evidence of record indicates a growth rate range of 2.8-3.5 percent. The range is premised upon all four parties' proposed growth rates. The PP&L claim of 4 percent overstates the growth by at least 50 basis points. The 50 basis points adjustment reflects an adjustment for other market factors (PP&L main brief, pages 219-220). I find the arguments proposed by OTS, OCA and PPLICA on the adjustment to be reasonable. The three parties argue

that PP&L produced no evidence to support it and that it appears to be only an adder (OCA St. 1A, page 14; PPLICA St. 8, page 42; and OTS main brief, pages 127-128.

The 3.15 percent growth recommendation is the mid-point of the 2.8-3.5 percent range. The use of the mid point offsets aberrations and biases in the data and any bias the expert witness may have.

PP&L contends that the quality of its management should be considered in its fair rate of return. PP&L witness Hill testified that the Company has undertaken a number of important initiatives, cost reduction efforts and productivity improvements. As explained by the witness (PP&L St. 1, pages 4-6):

> Over the past decade, the Company has engaged in extensive efforts to maintain rate stability, control costs, increase revenues, promote economic development and address social issues in its service territory. Taken together, these efforts demonstrate PP&L's commitment to operate an effective and efficient company that provides reliable and economic electric service to its customers.
>
> The Company has implemented a series of cost reduction measures, including reductions in staff levels, elimination of unnecessary functions, a fundamental restructuring at the corporate level and a re-engineering of critical processes. PP&L also has engaged in an extensive refinancing program to reduce its cost of fixed rate securities. The Company has significantly reduced its number of employees and has taken important steps to hold the line on the cost of benefits. A recent example is the Company's Voluntary Early Retirement Program (VERP) which will reduce its workforce by over 600 employees, or about 8% . . . .
>
> The Company has undertaken extensive efforts to operate its Susquehanna nuclear

> plant both effectively and safely. Susquehanna has had an outstanding operating record since it began commercial operation in the early 1980s. Susquehanna has had an annual capacity factor greater than 70% in every year since 1987, including 1993 which contained an extended refueling outage. In three out of these seven years, Susquehanna's annual capacity factor exceeded 80%. PP&L has calculated that during the 1987-93 period its customers realized energy cost savings of approximately $140 million as a direct result of the Company's ability to operate Susquehanna at a capacity factor above 70%. Susquehanna is recognized by industry organizations and the investment community as an efficient, well-run plant.
>
> On the revenue side, the Company has made a major commitment to economic development to retain existing industry and to attract new businesses to its service territory. In addition to revenue enhancement, these economic development efforts have produced thousands of new jobs in the Company's service territory. While increasing sales, the Company also had remained committed to conservation, load management and demand-side management (DSM) programs designed to promote more efficient and cost effective usage by its customers. . . .
>
> Finally, the Commission has maintained and expanded its commitment to those customers who cannot afford to pay their electric bills. As explained by Mr. Bujnowski's testimony, the Company has been and continues to be a leader in this important area and is proposing a number of important new social programs in this case.

(PP&L St. 1, pages 4-6). These initiatives, according to PP&L, have permitted it to avoid filing for a base rate increase for over ten years. As a result of these efforts, the Company's rates today are about the same as they were in 1985, despite an increase in the CPI of more than 30 percent (PP&L St. 1, page 4). PP&L contends that its rates have actually declined in real terms.

PP&L contends that above the fundamental risk factors in this case, the Commission should recognize the Company for its efforts in maintaining rate stability to customers over the past ten years and adopt an equity cost rate allowance at the upper end of the zone of reasonableness.

The OCA submits that not only does the record in this proceeding not support a finding of a 13 percent cost of common equity for PP&L, the record does not support a bonus to PP&L's shareholders.

The Company relies on the testimony of PP&L witness Hill to support its claim of management excellence (PP&L main brief, pages 215-216). However, the OCA submits that all of the listed activities refer to activities that a utility must undertake in order to meet its obligations under Section 1501 of the Pennsylvania Public Utility Code, 66 Pa. C.S. §1501. Section 1501 requires that:

> Every public utility shall furnish and maintain adequate, efficient, safe and reasonable service and facilities....as shall be necessary or proper for the accommodation, convenience and safety of its patrons, employees and the public.

66 Pa. C.S. §1501.

The OCA submits that Section 1501 establishes a standard that all utilities are required to achieve, and PP&L's request that it receive a bonus for "excellent management" asks the Commission to reward the Company for providing the quality of service it is mandated to provide.

The Commission has in the past examined the issue of an incremental return based on a utility's quality of service. In Pa. P.U.C. v. National Fuel Gas Distribution Corp., 73 Pa. PUC 552, 121 PUR4th 434 (1990). NFGD requested an incremental return based on its alleged high quality service. The Commission found pursuant to 66 Pa. C.S. §523(a) that:

> (1) Distribution is providing efficient, effective and adequate service to its customers; (2) Distribution has implemented a program which is designed to upgrade and improve the quality of service provided to Distribution's customers; and (3) Distribution has successfully met the Commission's performance criteria concerning energy supply alternatives.

73 Pa. PUC, page 612. However, even with this finding the Commission denied the Company's request stating:

> Finally, we deny NFGD's exception that the Company should receive an incremental return based upon a high quality of service. We agree with ALJ Cohen that NFGD is obligated to provide customers with a quality of service which is adequate, efficient, and reasonable. Accordingly, in the context of the instant proceeding any award is unwarranted.

73 Pa. PUC, page 611. Although the Commission has in the past granted West Penn Power Company's request for an equity bonus for management performance, this reward was tied to the fact that West Penn had the lowest electric rates in Pennsylvania. See Pa. P.U.C. v. West Penn Power Company, 73 Pa. PUC 454, 510, 119 PUR 4th 110, 116 (1990); Pa. P.U.C. v. West Penn Power Company, 79 Pa. PUC 122, 185 (1993); Pa. P.U.C. v. West Penn Power Company, Docket No. R-00942986, slip op. at 99 (Order entered December 28, 1994). OCA contends that there is no evidence in this proceeding that would

support a similar adjustment for PP&L. Moreover, in each of the West Penn proceedings, the Company specifically included in their filing a quantified request for an equity bonus for management performance. As discussed above, PP&L had not, prior to its main brief, asked for an adjustment related to management performance. OCA submits that for the reasons discussed above, PP&L is not entitled to receive a "reward" of a 13.00 percent return on equity for quality of service.

This recommendation agrees with the OCA that because PP&L did not make specific claim for management performance, it did not carry its burden of proof. Therefore, no management adjustment will be made.

PP&L contends that increased competition is the most important single issue facing the electric industry today (PP&L main brief, pages 210-212). The determination of the cost of common equity is not a mathematical exercise; it must reflect, at least to some extent, real word conditions and investor expectations.

PP&L sees competition from cogenerating, independent power producers, customer self generation and wholesale competition from other electric utilities under the Energy Policy Act of 1992.

PP&L contends that this new level of competition has created grave uncertainty within the industry and has dramatically increased the risk of investing in electric utilities. The impact of these increased risk factors has been clearly demonstrated in the recent financial performance and changing investor perception

of the electric utility industry. Since October 30, 1994, the S&P Public Utilities have lost approximately 19 percent of their market value, with the electric utilities within that group losing over 25 percent of their market value (PP&L St. 12, page 11).

The bond rating agencies also have reacted to this increased risk by establishing a new matrix for measuring the financial strength of electric utilities. Specifically, S&P has categorized each electric utility according to its assessment of its business position as above average, average or below average. Factors considered by S&P in making this determination are markets and service area economy, competitive position, fuel and power supply, operations, asset concentration, regulation and management. Id. at 12.

PP&L contends that three industry-wide risk factors will have an effect on PP&L. PP&L has a significant number of industrial customers, who are more likely and better able to capitalize on new competitive options than other customers (PP&L St. 12, page 14). PP&L also has a relatively large amount of cogeneration on its system at a relatively high cost as compared to current market rates. Id. This will impose further competitive pressure on the Company.

PP&L also faces further important risk factors, including aggressive competition from gas utilities for the space heating market, a large construction program and major expenditures to comply with the Clean Air Act Amendments of 1990 (PP&L St. 12,

pages 14-18). Moreover, PP&L contends that it has a relatively low common equity ratio and above average financial risk.

PP&L contends that the combination of these increased business and financial risks resulted in the downgrading of PP&L's bonds by S&P from A to A- in July 1994.

The OCA contends that all the risk factors referenced by PP&L are recognized in its DCF analyses. OCA contends that its recommendation is fully responsive to changes in the capital markets and perceptions of an increasingly competitive electric industry (OCA St. 1, pages 21-44; OCA reply brief, page 106).

OTS witness Deardorff contends that PP&L has a negligible financial risk differential in comparison to OTS' barometer group (OTS St. 1, page 33). Further, OTS contends that PP&L has less business risk than its barometer group. OTS contends that out of seven business risk indicators presented by PP&L, only one ratio dividend yield indicated higher risk (OTS main brief, page 124).

PPLICA contends that if PP&L has increased risk through its proposal to substantially increase rates to interruptible customers (PPLICA main brief, pages 24-26).

The use of PP&L market data and the market data for the barometer groups will, if there are risk differences between PP&L and the industry, offset the effect of those differences. PP&L has not presented evidence that is persuasive that it's experiencing business or financial risk that other members of the industry are not experiencing or that investors have not considered any risks

that it may experience. Therefore, this recommendation makes no risk adjustment find for PP&L in this proceeding.

Therefore, this recommendation finds a DCF common equity cost rate of 10.9 percent (adjusted dividend yield of 7.75 percent plus a growth rate of 3.15 percent).

Summary of Recommendation

Capital Structure	Ratio %	Cost Rate %	Weighted Cost %
Long-Term Debt	46.53	7.97	3.71
Preferred Stock	7.59	7.31	.55
Common Equity	45.88	10.90	5.00
	100.00		9.26

Under this recommendations 9.26 percent overall rate of return, interest coverage levels, a rate of return testing technique, on an after income tax basis is 2.5 times. PP&L's proposed after income tax interest coverage level is 2.7 times while the OCA's is 2.5 times, PPLICA's is 2.4 times; DOD's is 2.5 times and OTS' is 2.4 times.

VIII. POSITIONS OF THE PARTIES

Five parties in this proceeding, PP&L, OTS, OCA, DOD and PPLICA, have sought to address the issues associated with the overall revenue requirement for PP&L. Various other briefs have been filed and some of the other parties addressed elements of the general revenue requirement topic. I have, above, addressed some of these contributions explicitly. However, upon consideration of the several briefs which have been filed, I feel that a short review of the briefs generally is appropriate.

The briefs of PP&L, OTS, OCA, DOD and PPLICA are fairly obvious. Not all of these parties address all of the issues but these parties cover the general area of revenue requirement, rate design and other issues. Of course, the PP&L brief is the most complete, PP&L having to respond to all other parties. I will proceed, however, with a review of the various additional briefs, in order to provide some basic information about what the parties seek to address. Some of the issues presented are not direct ratemaking issues but are otherwise associated with this proceeding.

OSBA presents a "traditional" brief. It addresses cost of service, revenue distribution, allocation of a smaller increase than the one sought by PP&L and even allocation of a negative revenue deficiency (a rate decrease). The OSBA summary of argument, at page 3 of its main brief, provides a good overview of this party's positions. That summary follows:

> The cost of service study performed by PP&L in this proceeding allocates generation and transmission demand costs on the basis of the widely-accepted twelve coincident peak method. The Company's cost study demonstrates that the small business customers in PP&L's service territory are paying substantially higher electric rates than are warranted. For instance, the GS-1 class is presently contributing a rate of return that is nearly twice the system average return.
>
> In an effort that begins to ameliorate the existing imbalance between class rates and class costs of service, PP&L has proposed below system average increases for the GS-1 and GS-3 classes. Noting the reasonable amount of progress by those classes toward cost-based rates in this proceeding, the OSBA strongly supports PP&L's proposed revenue distribution.
>
> Nevertheless, because of the significant disparity between rates and costs for the GS-1 class, the OSBA proposes an automatic annual adjustment mechanism. Under this mechanism, the GS-1 rates would be reduced annually so as to continue moving those rates toward cost of service without awaiting the filing of another base rate proceeding by PP&L.
>
> Finally, in implementing a final revenue award, the ALJ and the Commission should adopt a scaleback of the Company's proposed revenue allocation that preserves a reasonable amount of the progress toward cost-based rates for the GS-1 and GS-3 classes that was inherent in the Company's original proposal.

The OSBA reply brief responds mainly to OCA. OSBA discusses Commission decisions relied upon by OCA, in some detail. It states that a review of the cases reveals that none of them involves a situation where the Commission opted for adoption of a peak and average methodology, in lieu of the utility-sponsored 12 CP methodology. Discussion includes two West Penn Power proceedings and one Philadelphia Electric Company proceeding.

Eric Epstein filed a main brief and a reply brief. PP&L filed a motion to strike portions of the main brief and Mr. Epstein responded to this motion. I have touched on the motion already and will again state my fundamental view of the main brief.

The brief does include much extra-record material, which Mr. Epstein uses in his arguments. I am not specifically striking portions of the brief but I am not accepting factual content as if the references were part of the record. I agree with PP&L that Mr. Epstein has improperly used extra-record evidence. This use brings up hearsay problems and problems associated with the right to respond to evidence. I repeat that I am not specifically striking particular portions of the brief but I am not relying on them for factual content. PP&L is fundamentally correct in its view.

The Commission might properly use part of Mr. Epstein's brief as a basis for initiating other proceedings. However, the extra-record evidence referenced by Mr. Epstein should not be used as a factual basis within the context of the Commission's disposition of this rate proceeding.

At page 30 of his main brief, Mr. Epstein indicates agreement that the Susquehanna plants are used and useful. He disagrees with PP&L on several other points, including the expected operating life of the plants. He expresses particular concern about disposal of nuclear waste. The reply brief responds mainly to PP&L and addresses such matters as safety and nuclear waste storage. Mr. Epstein indicates that he, himself, is quite

experienced in this area and I agree. However, he was not specifically and explicitly qualified as an expert.

Whatever the situation, I appreciate Mr. Epstein's role in this proceeding. I suggest that Mr. Epstein has played a useful and beneficial role with respect to nuclear power and the regulation of nuclear power by state and federal governments.

The CEO main brief emphasizes the social programs and demand side management. The CEO mentions at the start of its introduction that it is a non-profit organization serving the low income and elderly in northeastern Pennsylvania. It fundamentally advocates expansion of the social programs. For instance, it would have additional programs available for base load customers. It supports the DSM initiatives. It states that DSM programs pay dividends in lessening the burden of rate increases and are environmentally friendly.

CEO indicates some suspicion of PP&L DSM initiatives and would push for a broader program. It would emphasize DSM for existing and base load customers. At pages 3 and 4 of its main brief, CEO lists seven mandates which should be imposed on PP&L in exchange for any rate increase. These emphasize the social program and DSM initiatives CEO advocates. It also states its goals, at page 21.

The Sierra Club filed a main brief and a reply brief. The reply brief is subject to an OTS motion to strike portions of that brief. The Sierra Club has responded to this motion. OTS invokes fundamental fairness and indicates that Sierra Club raises

arguments, for the first time, in its reply brief. It indicates the view that Sierra Club did not take steps to litigate the issues but waited until the reply brief was filed. It also expresses the view that the reply brief is in the nature of testimony. It would strike pages 5 through 9.

The Sierra Club takes the position that it was replying to OTS and other positions. Sierra Club suggests that the OTS could respond to its reply brief, if that seems to be appropriate. It further argues that PP&L has been assigned the basic burden of proof and this burden does not apply to the Sierra Club.

OTS raises a valid point with its motion but I conclude that, on balance, the motion should be denied. I would rather have broad discussion of these topics than a cut-off of debate. Moreover, OTS can respond in its exceptions and reply exceptions to issues raised and addressed by the Sierra Club.

The Sierra Club, in its main brief, raises various arguments which do not bear directly on the merits of this proceeding. Most particularly, it further challenges a ruling I made on the record, relating to testimony of its witness. This matter is addressed, at least, by PPLICA. I expect that it will be addressed sufficiently in later portions of this decision.

The Sierra Club also urges termination of the ECR and offers various positions on rate design. It would hold down the residential customer charge, require increased DSM efforts and impose a DSM charge. This charge would be imposed on all power distributed by PP&L.

In its reply brief, the Sierra Club urges full funding of environmental remediation, adequate funding of social programs and an increase in nuclear decommissioning expense. Concerning social programs, the Sierra Club too suggests that these programs may be driven by public relations considerations rather than judgment about what is good for the system. It also addresses OTS positions. The Sierra Club provides several attachments with its main brief.

The UCC, in its main brief, addresses mainly cost of service study methodology and revenue distribution. It advocates a 1 CP methodology, as opposed to the 12 CP methodology employed by PP&L. It would refer essentially to the annual peak rather than the broader spread of the PP&L methodology. It would modify what it views as interclass subsidization. One position it takes is that the PP&L commercial and industrial rate classes are currently paying large subsidies to other classes. It provides detail and numbers.

In its reply brief, the UCC responds to PP&L and DOD concerning its single peak analysis and their criticisms of that analysis. It takes the position that PP&L must have enough capacity installed to be able to meet its overwhelmingly large winter peak. It also addresses allocation. Among other things, it argues, essentially, that this particular rate increase is not large by comparison to others.

Beth Steel also filed a fairly traditional "ratemaking" brief. It addresses cost of service, revenue allocation and rate

design. Beth Steel also states, at page 2, that it is a manufacturer of steel and steel products and is the largest retail customer on the PP&L system. It briefly describes its facilities. It also expresses particular concern about increased rates for interruptible customers. It proposes that the cost of credits associated with the economic development initiative and the industrial development initiative (EDI and IDI) be spread on all customers.

Beth Steel refers to an increase to rate schedule ISA (interruptible service by agreement). It emphasizes the status of the agreement. In its reply brief, Beth Steel addresses primarily the ISA contract matter. It also endorses the view set forth in the preamble to the main brief submitted by PPLICA. Beth Steel disagrees with OCA concerning rate schedule ISA. It asserts that the record is inadequate for the action contemplated and states that the existing ISA contract must be given effect.

CEPFOD also addresses cost of service. It is particularly interested in rate RTS, the residential heating rate. In its introduction, CEPFOD states that its members are ratepayers of PP&L. However, as it states, CEPFOD members are also competitors of PP&L, for the residential heating market. It contends that any subsidy of the RTS service (residential heating service) is an unfair means of competition, because this permits PP&L to provide heating service below cost while shifting the rate subsidy's cost to other ratepayers.

CEPFOD refers to antitrust considerations and to PP&L's status as a regulated utility. It provides considerable information about the background of rate RTS and makes various suggestions. It states, at page 5, that its primary recommendation is that the Commission direct PP&L to withdraw rate schedule RTS and require PP&L to credit RTS customers $50 a month for a time period of between three and five years. It views this credit as sufficient for those customers to recoup their investment in RTS equipment. It provides an alternative recommendation at page 6.

CEPFOD proceeds to address cost of service in more detail and to present further arguments about its recommendations. It offers, as well, various proposals concerning residential rate design. Among other things, it would reject the proposed third block in the RS rate. It addresses these issues again in its reply brief. It also discusses related positions by OCA and OTS. Of course, it also responds to PP&L.

Crown provides a short brief which contains the following summary of argument, at page 3:

> Crown American Realty Trust recommends the use of a modified 12 CP cost-of-service methodology for purposes of allocating any revenue increase granted by this Commission in this proceeding. PP&L's 12 CP cost-of-service study is flawed and must be corrected. The adjustment that must be made include the use of a proper interruptible service credit, the appropriate allocation of Non-Utility Generator purchased power costs and the appropriate reflection of the cost of providing EDI and IDI credits. Finally, Crown American Realty Trust recommends the use of PPLICA's revenue allocation proposal for assigning the appropriate level of an

authorized rate increase to the various rate classes.

In its reply brief, it emphasizes its response to OCA. It states that the Commission should reject OCA's proposed peak and average cost allocation methodology.

IX. RATE STRUCTURE

Several parties have briefed the issues associated with rate structure. Moreover, there are several issues presented which are, to some degree, interrelated. Partly because of this situation, I will not individually review the various arguments made in the main briefs and the reply briefs. Another reason for not repeating all arguments is that this would produce considerable redundancy. In some instances, more than one party will make an argument and there is really no point in describing each argument in detail, because they are quite similar.

If I have missed a significant issue, that should be pointed out to the Commission in the exceptions, by an interested party. If and when a party points out such an omission, I recommend that the party state where in the Recommended Decision the missing discussion should have been placed.

A. Cost of Service

The PP&L discussion of this topic commences at page 232 of its main brief. As PP&L indicates, a formal cost of service study is required but the results of such a study are only a guide to the designing of rates. The cost study is an important factor but not the only basis. Moreover, the cost of service analysis is not exact and there is no single correct method of cost allocation. PP&L, of course, suggests that its study steers clear of extreme impacts and produces reasonable results. A brief description of the PP&L cost study, and one of the alternatives proposed by other

parties, is contained at page 4 of the Crown main brief, as follows:

> As in past proceedings, PP&L is proposing to utilize the 12 coincident peak (12 CP) cost allocation methodology in this proceeding. That is, PP&L utilizes essentially the same cost allocation principles in this proceeding as it did in its last base rate case proceeding. PP&L St. No. 7 at 5. As indicated by PP&L, this approach assigns production and transmission demand costs on the basis of the average of the 12 monthly coincident class demands occurring at the system average peak. Id. This method should be contrasted with the single coincident peak (1 CP) methodology as enunciated by UCC Witness Eisdorfer in UCC Statement No. 1. As indicated by UCC Witness Eisdorfer, the selection of the methodology to allocate to classes a utility's demand related production and transmission costs is one of the most important issues in any cost of service study for an electric utility. UCC St. No. 1 at 5.

PP&L indicates past support for its 12 CP method and provides four basic reasons why it should be used: (1) rate stability, (2) recognition of the PJM obligations which require capacity over a 12 month period, (3) recognition of class diversities and (4) adequate recognition of the role of scheduled generating plant maintenance. PP&L then refers to the winter peak method proposed by UCC and to the OCA proposal of a "peak and average" method. Under the OCA approach both winter and summer peaks and energy throughout the year would determine demand cost allocation.

As PP&L indicates, these two alternative proposals tend to go in opposite directions. The OCA method would tend to favor residential customers at the expense of large industrial users

while the 1 CP method would increase the cost burden of residential customers.

Concerning the 1 CP method, PP&L argues that its system is not in place simply to meet a single peak day requirement. It refers to maintenance of plant during off-peak periods, which reduces the system capacity. PP&L also responds to the OCA peak and average proposal which, as PP&L states, tends to seek to address the relative cost of base load units and peaking units. PP&L further argues that this method is inaccurate with respect to the generation planning process, by focusing only on fuel savings rather than on total cost and reliability of service.

PP&L acknowledges the argument that customers who use energy evenly over the year, and who might be assigned base load plant, could be assigned a higher cost of capital for those plants. The counter-argument provided is that these base load customers should also be assigned the lower average fuel costs of these base load plants.

Essentially, plants used for peaking purposes have low capital cost and high energy (or running) costs. Base load plants, which are designed to be used throughout the year to meet ongoing power demands, tend to be more capital intensive and to have lower running costs. PP&L also argues that the OCA proposal does not properly implement the basic peak and average theory.

At page 238, PP&L turns to the issue of the industrial interruptible credit. Its cost of service study accounts for the existence of interruptible load by first allocating cost to the

class having an interruptible option (ISA, LP-4 and LP-5). It allocates according to the coincident peak demand and then provides a credit equal to the value of interruptible load on PP&L's system. It bases the calculation on the cost of a peaking unit. It discusses two challenges to this approach.

Industrial witnesses argued for a higher credit and even for a lack of assignment of generating costs. The OCA witness favored a reduction to the credit. Here again, PP&L suggests that it holds the middle ground and the appropriate result. PP&L states further that, largely because of economic development considerations and gradualism, it has proposed an interruptible credit above the level reflected in the cost of service study. It gives this as one example of factors other than cost of service, used in calculating rates. It also states that it views interruptible capacity (the capacity available because the customers are interruptible) in a manner similar to peaking units and not base load (coal or nuclear) units. It also indicates that, in its view, interruptible load is not a good, reliable resource concerning generating capacity.

PP&L provides details. It further states that, because it has adequate generating capacity, interruptible customers have in fact received what is essentially firm service. It also refers to the fact that the interruptible category, as now designated, is only a few years old. PP&L also states its opposition to the OCA proposal concerning interruptible service. It indicates that the OCA result would impose a sudden and drastic increase in cost

allocated to interruptible customers, in violation of the principles of gradualism.

PP&L's next topic is distribution plant cost allocation. This relates to the calculation of customer charges. The PP&L approach was the "minimum size" system method. Two major alternatives were proposed. Among other things, the "zero intercept" alternative was suggested. PP&L criticizes the alternatives briefly. These methods are essentially technical choices made by cost of service experts.

For the balance of its discussion under the cost of service heading, PP&L criticizes the various cost allocation alternatives which were presented. It refers first to criticism by the CEPFOD witness relating to administrative and general costs. It next refers to the allocation of NUG (non-utility generator) output payments. It refers (at page 247) to a technical adjustment related to ECR revenue. PP&L indicates a lack of opposition to this suggestion. I accept the adjustment.

PP&L goes on to state that interruptible customers should not be treated as a separate class, for cost of service study or tariff purposes. PP&L argues that large power customers receive essentially the same services as firm or as interruptible customers.

The corresponding PP&L reply brief discussion commences at page 98. It follows a similar pattern to the pattern of the main brief. PP&L suggests inherent acceptance of its 12 CP method. It also provides further criticism of the OCA peak and average

approach. The final criticism offered, a practical criticism, is a suggestion that, under the peak and average approach, customers with higher load factors and lower per unit costs would be allocated more cost. PP&L indicates the view that this would discourage increases in efficiency.

PP&L goes on to discuss the various other topics raised, under four topic headings.

DOD, at page 29 of its main brief, indicates general support for the PP&L positions. Starting at page 18, DOD provides various discussions of these issues. It indicates the view that rate design involves considerable compromise and realistic appraisal of end results.

Crown suggests three adjustments. The first involves interruptible load. It supports PPLICA concerning allocation of revenue credits to all customer classes. A second adjustment relates to NUG capacity. It again indicates support for PPLICA in recognizing the demand portion of purchased power costs. The third adjustment relates to the economic development initiatives rider (EDI) and the industrial development initiatives rider (IDI). Crown again references PPLICA and suggests that it is unfair to assign costs solely to the rate schedules under which the pertinent customers took service. Crown supports PPLICA's recommendation that costs be allocated to all customer classes. Crown suggests a $100 million annual subsidy to residential customers, again referencing PPLICA. Crown also supports PPLICA concerning the

various suggested revenue increases. It would take steps to reduce the subsidies it perceives.

The OTS discussion of rate structure commences at page 133 of its main brief. OTS does not devote an explicit section to cost of service studies. Rather, it addresses its issues individually. It follows the same pattern in its reply brief, with the discussion commencing at page 62.

OCA commences its discussion of rate structure at page 264 of its main brief, volume II. It provides first a brief introduction and then addresses cost of service studies. It provides a brief outline of its positions at page 265, as follows:

> The OCA recommends three modifications to the Company's class cost of service study. First, the OCA proposes that production and transmission related costs be allocated using the Peak and Average methodology. Second, the OCA proposes that the distribution demand allocators be adjusted to account for the load-carrying capability of the minimum distribution system. Third, the OCA proposes that the value of interruptible credits to other ratepayers in the cost study be the current value of peaking capacity to the system. OCA St. 3 at 4.
>
> In addition, the OCA recommends that the Company's proposed customer charge increase for Rates RS and RTS be rejected. The Company has not established that an increase in the customer charge is justified. Dr. Johnson has also recommended that the Commission reject PP&L's proposal to increase the number of energy blocks for the residential classes from two to three. The Company has presented no valid reason for this increase in energy blocks.
>
> Lastly, the OCA has recommended that the RTS rate schedule be closed prospectively with current customer locations being grandfathered under the existing rate schedule.

> Additionally, the OCA recommends that the RTS class be given no greater a percentage increase than the RS class, or in the alternative, the 2.3¢/kwh rate differential that currently exists between the two rate schedules be maintained.

The OCA cost of service study discussion starts at page 266. It presses for use of its peak and average methodology. It would adjust the demand allocator in the minimum distribution study and adjust the value of the interruptible credit. It also reviews the Company's 12 CP method. It criticizes the Company method and indicates that both energy and demand should be considered with respect to cost of service. It suggests that energy requirements affect the Company's capacity planning decisions. It refers to PP&L and OCA testimony concerning the various tradeoffs associated with capacity planning. It states that the peak and average methodology provides explicit consideration of both the amount of capacity required to meet system peak requirements and the energy requirements of the classes.

OCA goes on with discussions of class peak demands and related factors. It includes an influence of the summer peak. OCA also presents Commission and other precedent in support of the proposition that cost of service should be determined on an energy/demand basis. It goes on to address the criticisms of other parties. It asserts that capacity may be determined on a demand basis but that the mix or type of capacity (including the cost of that capacity) is influenced also by energy considerations. It also suggests that there is nothing improper about collecting

capacity costs on a usage (or energy) basis. It continues with discussions of energy, cost and demand. It refers to its statement 3B, pages 6-15.

Starting at page 277, OCA discusses the minimum distribution system study. OCA would correct what it views as an overstatement of customer related cost. It provides details and responds to criticism by PP&L and OSBA. One basic point distinguishes load-carrying capability from customer-related matters. Considerable detail is provided.

Finally, OCA addresses the interruptible rates for industrial customers. The main concern is the value to be utilized for cost of service study purposes. OCA suggests that, at this time, the value of peaking capacity is relatively low. It refers to the presentations of PPLICA and Beth Steel, providing criticisms. It submits that interruptible customers should be assigned a portion of the production investment. It points out that they use production facilities during many hours of the year. It provides a brief conclusion at pages 288-289.

The OCA rate structure and cost of service discussions continue at page 116 of the reply brief. It criticizes the PP&L middle-of-the-road argument and defends its positions. It discusses cost of service briefly, with emphasis on the peak and average method and the minimum system argument. It states that the Commission should change the cost of service methodology for PP&L and distinguishes the cost of service study (which is a guide to determining revenue allocation) and the actual allocation (which

involves the principle of gradualism and other considerations). It submits that radical change can be avoided, as necessary. It then discusses five basic categories of opposition to the peak and average methodology. See page 118.

OCA again submits that there is nothing wrong with collecting fixed costs over usage. It characterizes the opposing view as one which relates capacity cost only to class demand at the time of the system peak and which makes additional usage merely a free good, with no cost other than fuel. It emphasizes the point that generating capacity is in place to produce energy. It criticizes the Beth Steel argument that energy consumption is double counted in the peak and average methodology. It refers to use of the load factor. Various additional details are provided. Concerning minimum system, OCA responds to PP&L and OSBA.

The PPLICA discussion of cost of service commences at page 47 of its main brief. PPLICA defends the PP&L methodology. However, it refers to its own modifications and further states that a methodology based on a single coincident winter peak would be the ideal cost of service study. It would make corrections relating to customer class rate of return.

PPLICA offers adjustments relating to interruptible load, NUG purchased power and allocation of costs associated with EDI/IDI programs. Concerning interruptible load, it offers various detailed criticisms and proposes adjustments. It states that the PP&L study should include a revenue credit relating to interruptible load which is equal to the revenue credits actually

being proposed, as embodied in the rate proposals. It then proposes that the cost of paying these revenue credits be allocated to all customer classes, on the basis of the 12 CP production demand allocation factor. It views this step as proper to correct a mismatch contained in the Company analysis. It suggests further that interruptible load is undervalued.

Concerning NUG purchased power expense, it would assign some on a demand basis as well as on the energy basis. It refers to the ECR. It states that a greater than proportionate share of NUG expenses are allocated to high load factor customers, such as rate schedule LP-5 customers. Concerning EDI/IDI credits, it would allocate cost on a system-wide basis. It would not limit participation to the rate schedules where the customers in question are situated. It points to a PP&L witness statement that these programs benefit all customers. It makes particular references to rate schedule ISA, which contains only one customer.

PPLICA continues, at page 56, to criticize the OCA peak and average approach. It would not use energy to compute the demand allocation factor, in assigning the cost of fixed generating station investment to the classes. It continues with further detailed criticisms. One point is that the peak and average methodology encourages customers to refrain from increasing consumption during off-peak periods. An additional point is that the OCA method improperly allocates transmission plant on the same basis as generating plant.

PPLICA, at page 17 of its reply brief, continues its criticisms of the peak and average method. It refers to Commission precedent, testimony of the PPLICA witness and the OCA resource value approach to interruptible service ratemaking.

The OSBA cost of service discussion commences at page 4 of its main brief. It first expresses its general positions at page 3, as quoted within the "Positions of the Parties" discussion.

OSBA provides reference to the last PP&L decision by the Commission. It accepts this method, having found nothing superior. OSBA proceeds to outline the positions of other parties. It offers criticisms. It concentrates on the OCA peak and average approach. It defends the Company approach to classification of distribution plant. It offers reference to an old Met Ed decision. Finally, OSBA offers comments about the results of the PP&L cost allocation study. It discusses cross-subsidies and refers to various developments. The OSBA reply brief mainly responds to OCA.

The UCC cost study discussion commences at page 4 of its main brief. It first discusses the PP&L 12 CP method. It then discusses the 1 CP method which is the basis for its witness's position. It suggests that the 1 CP approach is more a cost-based approach than is the 12 CP approach. It states that the winter system peak is considered to be the predominant driver of capacity resource planning.

The UCC further indicates that the manner in which PJM determines PP&L's installed capacity obligation does not support use of the 12 CP method, for capacity cost allocations. Again it

refers to the importance of the winter peak. It proceeds with a reference to other criticisms, by other parties, of the PP&L 12 CP method. Finally, it refers to the various PP&L responses. It also refers to the surrebuttal of its own witness. It further presses the position that the scheduling of generation maintenance does not impact the PP&L cost position situation, for production plant. It again emphasizes its point that the situation is driven by the annual system peaks which always occur in the winter.

The UCC, in its reply brief, responds to PP&L and DOD. It again emphasizes the winter peak. It indicates that we should ignore criticism based on concerns about generation mix. It refers to revenue allocation and the positions taken in the 1982 PP&L proceeding.

Beth Steel provides a summary of argument and then, at page 6, provides its main brief discussion of cost of service. It opts for the single coincident winter peak method of cost study development. It further states that even the Company's 12 CP method, as adjusted, evidences the fact that industrial customers are producing rates of return above system average. It refers to draconian rate increases for LP-5 interruptible customers. It proceeds to discuss the virtues of winter peak as an allocation method. It then proceeds to discuss what it views as flaws in the PP&L method.

It criticizes the PP&L approach to ratemaking for interruptible service. It provides the mechanism used by PP&L and asserts that interruptible service should be recognized as

cost-based service. It further asserts that "interruptible" means that the utility does not plan to supply power to the customer with the same degree of reliability as it provides service to its firm customers. The basic point is that the interruptible customer is not on the system during a significant peak.

Beth Steel would exclude generation-related capital costs. It views the PP&L capacity credit approach as flawed in a variety of ways. It further states that interruptible load should not be included in the customer class allocator, for determining production capacity cost. This variation produces higher rates of return for the classes containing interruptible customers.

Beth Steel also addresses EDI/IDI credits. It views benefits as system-wide. It refers to various positions taken by the parties. It would treat EDI and IDI customers by imputing the normal rate and then allocating the amount of the credits to all customer classes. The allocation method would be class non-fuel revenue. Beth Steel also refers to NUG payments and views the treatment as inconsistent with ECR treatment.

Starting at page 19, Beth Steel offers criticisms of the OCA peak and average method. It refers to the benefits of base load units and other related matters. In its reply brief it refers to its main brief, concerning cost of service. The reply brief deals mainly with rate schedule ISA and the related OCA proposal.

CEPFOD offers a cost responsibility analysis, with emphasis on the impact with respect to rate schedule RTS, a residential heating rate. Its main cost of service discussion

commences at page 7 of its main brief. It notes the negative rate of return for rate schedule RTS. It makes reference to various studies of the parties. It then proceeds with various cost of service points. It discusses intangible plant, the minimum system analysis, administrative and overhead costs and proper cost of study results.

At page 15, CEPFOD refers to the recommendations of its witness. It would set RTS cost of service at $46 million, $4 million more than PP&L assigned. It puts the current revenue from RTS customers as $20 million, approximately, which would require an RTS increase of $26 million, not the PP&L proposed increase of $3.4 million. This is based on overall system return. At page 5 of its reply brief, CEPFOD discusses the RTS class and evening peak demand. It provides discussion of the history of rate RTS.

The presentations of the parties, and the nature of this proceeding, make organization of this discussion somewhat complicated. The normal approach would be to discuss cost of service studies, then to discuss class allocation of revenue then to discuss the various details of rate design put forward by the various parties. In this instance, some of the arguments cut across these traditional categories, more than has usually been the case. I have chosen to follow the PP&L outline, largely because one outline should be followed to minimize the chance of duplicating discussions or missing issues. I will also, of course, review the other briefs to seek out issues and avoid gaps.

At this point, I need only choose a fundamental cost of service study approach and make a few decisions concerning variance on the basic approach. The three basic approaches presented by the parties are the Company's 12 CP method, the single coincident peak approach and OCA's peak and average method. The Company uses coincident peaks from each of the 12 months, the traditional approach taken by PP&L, which was proposed and accepted in the last proceeding.

The winter peak approach has considerable appeal and is, in my view, the classic approach. This would make demand charges depend essentially on the largest peak of the year, during the maximum service season for PP&L, the winter. The OCA approach uses energy as well as demand as an allocation factor in assigning the cost of fixed investment to the classes. The fundamental theory behind the peak and average method appears to be that base load generating plant is designed to reduce energy costs and that, therefore, some plant is chosen at least in part for energy purposes. This choice, the reasoning goes, should be reflected in the method of allocating investment among the customer classes. An alternative theory is that generating plant designed to meet peak service periods tends to be inexpensive in terms of capital investment but expensive in terms of fuel.

Upon reflection, I recommend adherence to the PP&L 12 CP method. I pick this method partly because of the PP&L arguments, especially the argument that plant maintenance is scheduled off the peak so that off-peak capacity becomes important, in ensuring that

customers receive adequate service all year. See PP&L reply brief, page 99. I also accept various other PP&L arguments about stability and adherence to a middle-of-the-road approach.

I find myself in agreement with the reasons expressed by PPLICA at page 56 of its main brief. I just do not agree with the energy method of allocating production investment. The 12 CP method is reasonable, has been the approach taken by PP&L for years and has been accepted by the Commission. The OCA approach does appear to be simplistic, especially because it does not appear to explicitly address the energy element of production plant or the capacity involvement of energy cost. I tend to further agree that the peak and average method produces improper price signals, although this characterization does depend on the orientation of the person analyzing the situation. See page 58 of the PPLICA main brief. On the other hand, the winter peak approach tends to go a bit far in the other direction and does not have broad support from the various participants.

I view the controversy relating to interruptible service customers as more a rate design problem than a theoretical, cost of service study problem. However, the parties have discussed the matter as both the cost of service study situation and a practical rate design situation. I will, therefore, briefly address this matter as a cost of service study problem. I will again address this matter under rate design, as it is presented by the parties.

PP&L puts the interruptible customers in their normal classes and manipulates the rate to get an interruptible rate.

Sometimes the parties seem to be talking past each other concerning this issue but, as I understand it, the calculation of the reduction and the allocation of the lost revenue are the fundamental issues, for cost of service purposes.

I agree with PP&L that interruptible service does not act like additional generation plant and that we are dealing with a peaking situation when we deal with interruptible load. Moreover, PP&L does not fully control interruptible customers for purposes of load reduction and these customers do enjoy rather good service, especially considering the rather adequate capacity enjoyed by PP&L currently. More technical arguments are raised against the PP&L calculations, by PPLICA and Beth Steel. I join the Company in having some confusion about a distinction between allocation and rate design. For allocation purposes, PP&L appears to do a proper "peak" analysis. PP&L uses a combustion turbine as a measure of cost saved. I agree with that approach. I also tend to agree with OCA criticisms and note that OCA seems to fundamentally agree with the PP&L approach. However, I reject the calculation variance offered by OCA.

The PP&L analysis seems to be fundamentally realistic and based on the PP&L system. I also agree with PP&L about its choices, for ratemaking purposes. I view the interruptible customers as members of their normal classes, members who have been, for a few years, given a particular break, based on both the theoretical interruptible considerations and the more practical considerations of meeting competition and industrial development.

I do have one more comment concerning interruptible industrial customers. This relates to the cost of paying the revenue credits associated with interruptible service. PPLICA would allocate these costs (or, more correctly, revenue shortfalls) to all customer classes, on the basis of the 12 CP production demand allocation factor. It views this adjustment as a correction of the mismatch contained in the Company analysis. PPLICA appears to have additional disagreements with the PP&L analysis but, on this one point, I find myself in agreement with PPLICA. Various programs benefit one class of customers directly, and only the participating customers within that class. However, the theory seems to be that all customers in the system benefit because of sales which would otherwise be lost, or for other similar reasons.

I am talking about such programs as residential conservation programs, commercial and industrial development programs and these interruptible rates. Unless we are dealing with an overtly eleemosynary situation, the theory must be that the program somehow benefits the utility's customers generally. Unless there is some particular reason why benefits are limited only to the particular class in question, normally benefits would be spread over the entire customer base because revenue realized benefits all customers. There is no proper way of distinguishing only those customers who happen to be in the particular class, along with the customer enjoying the direct benefits of the program.

Based on these considerations, I agree with PPLICA. This agreement will be touched on later, in the discussion of rate

design. Whatever the cost of service merits of the various parties' arguments, I repeat my view that, for me, interruptible service rate considerations are more a matter of ratemaking than cost of service theory.

A standard controversy arose about minimum system calculations. The Company used a straightforward approach which has been accepted previously and is a fairly standard approach. Variances were offered by OCA and CEPFOD. I accept the PP&L method. I also accept the PP&L approach relating to the CEPFOD argument concerning certain operating and maintenance costs.

A related controversy arose concerning NUG capacity. As PPLICA argues at pages 50-51 of its main brief, PP&L has recognized a demand component for NUG payments, for purposes of the ECR calculation. PPLICA asserts that PP&L is being inconsistent when it allocates NUG capacity, on a strictly energy basis, for base rate purposes. The PPLICA argument appears to be logical, even though PP&L has stated that its NUG payments are on an energy basis. Clearly, there is some capacity value involved here, for both native load and PJM purposes. I agree with the PPLICA argument and recommend that its energy/demand allocation method be utilized.

I proceed to deal with another issue under the cost-of-service category. This relates to the choice of customer classes for industrial customers. This could be viewed as a cost-of-service problem or, alternatively, as a ratemaking problem. I view it as more a ratemaking problem but it does have cost of

service implications and, following the parties, I address the matter briefly here.

I share the PPLICA suspicion that the keeping of interruptible customers in their fundamental classes can give rise to manipulation. However, I also agree with PP&L that interruptible customers are very like normal class customers, just with one revenue break given to them. Their patterns and services are similar to other customers in their classes. I tend to agree with PP&L (reply brief page 107) that this is more a matter of practical advantage and disadvantage than theory. However, on the basis of theory, I agree with PP&L. I reject the proposal that a new rate category for interruptible industrial customers be created.

On one more issue, I agree with PPLICA. This concerns the EDI/IDI credits, as discussed commencing at page 52 of the PPLICA main brief. Once again, I agree in theory and practice that the program benefits all PP&L customers. I see no good reason to view secondary benefits as limited only to industrial or commercial customers. In fact, no matter what the theory, I agree with the argument that cost of this activity be spread over all customers.

Either they all benefit from the situation or they should all share in the tax to raise revenue for the EDI/IDI program. I also agree with the argument that the broader spreading of this cost (revenue lack) helps avoid the spreading of the cost on the customer given the cost benefit, or cost break. As PPLICA points

out, this situation becomes especially acute with respect to Schedule ISA, which now contains only one customer, Beth Steel.

B. Revenue Distribution

Under this topic heading, the theory of cost-of-service studies meets the practical considerations associated with actual ratemaking. We are not now dealing with details of rate design, such as a blocking of residential rates or other particular details which concern mainly distribution within a customer class. Under this topic, the traditional approach is to consider the major customer classes or customer types, and to decide, based on cost studies and other considerations, how the revenue change is actually distributed.

The decision could be that an across-the-board choice is made which, as I recall, was done in the PP&L case involving the Susquehanna 1 plant. Alternatively, a decision could be made to adhere closely to the cost-of-service study. Normally, the result is a mix, based on various pressures and considerations. Often the principle of gradualism, whereby major impacts on individual customers are avoided, is important. However, at this stage, the focus is more on customer classes, mainly the big customer classes, rather than on individual impacts. It is at this stage where relative rates for commercial, industrial, residential and other customers are established.

In this proceeding, there is considerable interest given to this distribution problem. Many of the parties addressed the matter, some briefly and some more extensively. I will proceed to

review the basic arguments made and offer my recommendations, before we proceed to a more detailed consideration of rate design and actual ratemaking within the classes. I notice that OTS did not specifically address this problem, as a separate category. However, it does make a recommendation concerning off-peak treatment for rate schedule SE, street lighting. This could be viewed as a revenue distribution problem but has been treated as an individual ratemaking consideration. I will follow this lead and address it below.

The PP&L discussion of this topic commences at page 248 of its main brief or the corresponding OCA discussion begins at page 289 of its main brief, Volume II. OSBA addresses revenue distribution starting at page 14 of its main brief and then has an explicit discussion concerning allocation of a reduced revenue deficiency, commencing at page 19 of its main brief.

This question of distribution in case of a reduced increase (below the increase requested by the company) is a difficult one which often gets less attention then it deserves. The main difficulty is that discussion normally must occur before the actual increase, allowed by the Commission, is known. I appreciate the OSBA attempt to aid in this important consideration.

The fundamental process of revenue distribution, also referred to as revenue allocation, is described by various parties. One description is provided by OCA, at pages 290-291 of its main brief. Normally, the different classes are providing different rates of return under existing rates and the basic goal is to move

classes toward the overall rate of return allowed to the utility in question. Few parties differ over this basic goal but many recommendations are provided concerning limitations on movement toward system rate of return, often based on concerns about gradualism, and avoiding too great an increase, or even decrease, to a particular class of customers.

This process is, of course, heavily impacted with a choice of a cost of service study. This choice determines the starting point on the rate of return analysis and tends to govern the revenue change needed to get a particular class to the overall rate of return. If there are major departures from this approach, they might better be addressed under the general heading of rate design rather than under revenue distribution or cost allocation. One good example of this is the controversy associated with rate RTS. I join the tendency of the parties and will discuss this matter within the rate design discussion, below.

Before I review the positions of the parties and offer my own recommendations, I will address one matter, and a related matter, which tend to shed some light on this whole process and on the positions taken by the parties. This discussion could be included elsewhere in my decision but this point seems to be as good as any. The discussion does pertain to the basic choices being made with respect to distribution of the revenue requirement among the major classes of customers, especially the residential class and the industrial class.

My preliminary discussion, which is something of a digression but which I hope will be a useful digression, is fundamentally based on a PPLICA discussion in its main brief. However, I approach this discussion by first referencing the Beth Steel reply brief.

Beth Steel, in its reply brief, provides a detailed and strenuous defense of its ISA contract and rate. It is responding largely to OSA but it is also responding to a result produced by the PPLICA development. Before reaching the difference of opinion with PPLICA, Beth Steel refers to the PPLICA main brief, at pages 2-3 of the Beth Steel reply brief. Beth Steel endorses the views set forth in the preamble to the main brief of PPLICA. In particular, Beth Steel concurs with the PPLICA sentiment regarding the competitive arena in which all companies operate today. Beth Steel then proceeds to quote a passage from the PPLICA discussion.

PPLICA itself had produced various witnesses at hearing, who provided testimony supporting the concept of consideration for competitive problems of business customers and related considerations. Their testimony was somewhat instructive but their views must be balanced against concerns for residential and other customers. Whatever the final analysis might be, however, a consideration of the PPLICA statement, contained at pages 4-7 of its main brief, might be helpful.

PPLICA mentions its 22 members and identifies them as large PP&L customers whose competitive vitality is critical to the health of the local and state economies. It then proceeds to

develop the factual situation, as PPLICA sees it, of emerging competition for electric utility service. PPLICA uses such words as "baffled" and "confused" in characterizing the PPLICA response, actually the responses of PPLICA members, to the PP&L ratemaking proposals associated with this proceeding. One fundamental view of PPLICA is that PP&L is seeking to gain what revenues it can under the "monopoly" method of regulation before competition makes enjoyment of some of this revenue difficult or impossible.

At page 5, PPLICA refers to various increases associated with the overall increase sought by PP&L and indicates its opposition, for various reasons, to these elements of the overall increase. PPLICA takes considerable exception to some of these PP&L revenue elements. It also refers, in some detail, to the changes PP&L seeks, relating to interruptible power for PPLICA members. It addresses this matter largely in terms of competition faced by PPLICA members and, at the same time, now by PP&L. It indicates that the interruptible service rate would even increase 22 percent if there is no overall increase. It views these proposed results as extreme and argues against them.

It emphasizes real world considerations, as opposed to theoretical concerns, such as those concerns which might be associated with cost-of-service studies. In making this discussion, PPLICA raises what are essentially broad philosophical concerns, as opposed to detailed ratemaking choices, of a technical nature. I do not endorse the whole PPLICA statement but I have taken it into consideration. I add that a similar controversy

exists relating to rate schedule RTS, concerning residential heating service.

PP&L discusses the topic of revenue allocation (or revenue distribution) in its main brief, commencing at page 248. PP&L notes that each party has sought to minimize its own rates, at the expense of other types of customers. It also observes the fact that the parties have provided sharply contrasting proposals for allocation of the increase among the various rate classes. PP&L invokes gradualism and the basic principles of moving all classes closer to system average return, limiting increases to one and a half times the system average increase, allocating some rate increase to all classes and correcting what PP&L views as the overstated discount in rate design for interruptible customers.

PP&L contrasts proposals of other parties which, in the view of PP&L, would shift substantial costs to one class or another, in violation of the principles of gradualism and fairness. It provides various examples of the proposals put forward by other parties. At page 250, PP&L provides a table with some comparisons of these proposals. Of course, these vary with cost of service studies chosen and other choices made. PP&L puts forth its own proposal as a reasonable middle ground. PP&L also addresses briefly the problem of distribution for a reduced rate increase. It supports, generally, a proportional setback or a scaleback as the most equitable approach, using the same principles being used for the current proposed increase.

The corresponding reply brief discussion of PP&L commences at page 107. It again presses its own proposals as a reasonable, middle course. It further observes that several parties hinge their proposals on the adoption of their own cost studies. It views the underlying studies as flawed. PP&L further states that the other parties subscribe to the principle of gradualism, at least in theory. It further states that only one party throws off any pretense of honoring gradualism, the UCC.

OTS does not devote particular sections of its briefs to this topic. It does discuss various rate design issues.

OCA provides the results of its cost of service study at page 289 of its main brief and then, commencing at page 290, discusses revenue allocation. It provides a table comparing rates of return of major classes. OCA generally agrees with the PP&L attempt to move each class closer to the system average. It notes, however, that it uses a different cost of service study which starts with different rates of return at present rates. OCA restricts the increase to any one class to 1.33 times the overall increase. It refers to the RTS problem and refers to its particular RTS discussion, commencing at page 296 of its main brief. It provides its proposed revenue allocation. It proposes an increase for RTS and RS equal to the system average increase. It mentions a 16 percent proposed increase for the ISA class. It observes PPLICA support for this amount.

OCA proposes, for a lesser overall increase, that the increase be spread in proportion to the increase in total revenues

as its general recommendation provides. For a possible reduction in revenue, OCA would give first priority to a reduced revenue from the classes with the highest current rates of return. It further discusses the ISA class situation. It views the ISA rates as not having been approved by the Commission as just and reasonable. It quotes language from a 1989 Commission Order on the topic. It also refers to a 1990 Roaring Creek decision. OCA then proceeds to criticize the allocations of other parties.

OCA discusses revenue distribution in its reply brief, commencing at page 125. It defends its proposal as based on a sound cost of service study and reasonable. OCA also responds to OSBA. It further refers to the ISA class and a previous contract. It refers to the cost of service study and submits that the PP&L proposal to hold down these rates has not been supported. It considers the Commission to have discretion concerning this matter.

PPLICA discusses this general topic in its main brief, commencing at page 61. It would seek to achieve a 50 percent reduction in existing subsidies for each rate class provided that no rate schedule receives an increase in excess of 1.5 times the average increase. It puts forward this proposal as a systematic movement toward cost of service. It further views this as consistent with the principle of gradualism. It views the 1.5 times increase limitation as similar to the one of PP&L. It further refers to subsidies and to avoiding rate decreases. It refers to an exhibit which it attaches as Appendix C to the main brief. It provides details about its proposed changes. PPLICA

further observes that it has provided a computation of its recommended allocation at a $20 million increase. This is attached to the brief as Appendix D.

PPLICA would reject the PP&L proposed increases. It makes particular reference to the interruptible customers of rate schedules LP-4 and LP-5. It remarks that these increases are nearly three times the system average. This is a topic which is also discussed under cost-of-service and under rate design. It provides details of PP&L's proposal concerning the interruptible customers. It states a PP&L position that PP&L would have the large interruptible industrial customers receive a 22 percent increase even if there is no overall increase in this proceeding. This matter will be discussed further under rate design.

PPLICA goes on to discuss competitive trends, gradualism, individual impacts on customers and the history of the interruptible rate. It discusses jobs and provides additional details. It would reject comparisons between the proposed rates in this proceeding and rates prior to 1992. PPLICA is, obviously, very opposed to the PP&L proposals concerning industrial interruptible rates.

PPLICA, at page 72, also argues that the PP&L proposal fails to move rates adequately toward system average rates of return. It further views the subsidy matter, a related problem, as not adequately addressed by PP&L. It compares wholesale rates to LP-5 rates. It views the wholesale rate as a market rate and a useful benchmark for comparison. Once again, this topic can be

viewed as a matter of rate design as well as a matter of allocation.

PPLICA discusses these topics in its reply brief, commencing at page 3. As I have stated, these topics are properly discussed both under rate allocation among the classes and rate design. I will review the reply brief discussion under the rate design heading and address the matter there. The discussion of the PPLICA main brief is provided under this topic heading in order to ensure complete coverage and to make sure that the topic is discussed under both headings, if necessary.

OSBA discusses this matter in its main brief, commencing at page 14. It views small business rates as historically high, above cost of service. It views the PP&L proposals as resulting in improved relative rates of return for the GS-1 and GS-3 classes. It further states that the cost of service results would support substantial decreases for GS-1 customers and minimal increases for GS-3 customers. It refers to gradualism. It notes that it has not proposed an alternative rate distribution. It urges adoption of the recommendation of the PP&L witness. However, it views GS-1 as far out of line and suggests an automatic adjustment mechanism for reducing rates each year. It views this mechanism as appropriate until the next PP&L rate proceeding. It notes objections to this automatic proposal.

This is an interesting OSBA proposal but, for me, it departs too far from traditional ratemaking. It deserves further study but I do not recommend its adoption in this proceeding.

OSBA continues with reviews of the OCA and PPLICA proposals. It provides various details concerning shifts and increases. Of course, attention focuses on the GS-1 and GS-3 classes. OSBA expresses considerable disagreement with OCA but less disagreement with PPLICA.

OSBA also discusses, in some detail, the problem of allocating a reduced revenue deficiency. It first observes that a proportional scaleback is the traditional method of dealing with this reduced revenue increase. It refers to a weighted setback method proposed by its witness. It proposes this method as a way to move the classes as close to cost-base rates as they would move under the Company's original proposal.

OSBA reviews testimony by PP&L witness Kasper. It further addresses GS-1 and GS-3 rates. It advocates progress toward overall rate of return and provides examples. It further discusses another approach which it calls a constant differential approach. It further discusses a weighted scaleback approach. It indicates a lack of response to this proposal by other witnesses. OSBA provides results at three different levels of rate relief. It further reviews the situation of a very small rate increase where, under a standard approach, there would be little movement toward overall rate of return for the various classes.

These proposals by the OSBA witness do warrant further study but they appear to be rather complex and untested. I do tend to agree that, as a general matter, the Commission should seek to provide for movement toward the overall rate of return even at

smaller rate increases. However, this could produce unacceptably high rate changes for individual classes when there is little overall change in the level of revenues.

OSBA goes on to discuss allocation of a negative revenue deficiency, resulting in an overall decrease in revenues. Again it states that it is important to use the opportunity of a rate case to make some movement of class rates toward class costs, even if no rate increase is awarded. As a general matter, I agree with this overall objective.

OSBA, in its reply brief, responds to the OCA revenue allocation proposal. It refers to the OCA cost of service study and the PP&L cost of service study. It views the RS class as being subsidized by other classes and would provide for a larger increase than the overall increase for residential customers. It notes that the OCA revenue allocation depends on acceptance of its cost study. It would reject that study. It further presses for the use of its weighted scaleback approach and supports the Company's recommended revenue distribution.

DOD discusses both cost of service and allocation in its discussion commencing at page 19 of its main brief. It refers to discrimination and reviews some of the case law involved. It also discusses interruptible service and the proposal that a separate class be developed for interruptible industrial customers. DOD fundamentally supports PP&L in this matter. It takes no position relating to the CEPFOD arguments concerning RS and RTS rates. DOD

supports moving toward overall rate of return. It also voices support for gradualism in determining rates.

The UCC discusses this topic under the heading of interclass subsidies, commencing at page 19 of its main brief. It reviews the existing situation and provides a table indicating what it views as subsidies. It characterizes the residential customers as benefiting from the status quo. It provides detailed discussions of cost of service analysis and relative rates of return. It seems to prefer concentration on dollar subsidies rather than relative rates of return. It takes the position that PP&L's proposed revenue distribution only exacerbates the level of interclass subsidies. It further takes the position that the rate of return for PP&L's major commercial and industrial classes is high.

It presses for adoption of its witness's proposal to reduce the interclass subsidies. It proposes a limit of three times in the relationship between any class increase and the overall increase. It observes that PP&L has been out for 10 years and that the consumer price index has increased by more than 40 percent over that time period. In then turns to the proposals by other parties. It provides numbers about relative rates of return in discussing, especially, the positions taken by PPLICA and OSBA.

Beth Steel discusses revenue allocation in its main brief, commencing at page 22. It addresses the revenue allocation to LP-4 and LP-5 interruptible customers and the proposals

concerning an increase for rate schedule ISA. It views the interruptible increase as inconsistent with cost of service studies and competitive conditions. It further invokes the principle of gradualism.

Beth Steel also argues that the PP&L allocation proposal is not properly supported by a cost of service study. It indicates that the LP-4 and LP-5 classes are showing above the average rate of return and suggest that this should somehow cause the interruptible rates to not go up as much as PP&L proposes. Beth Steel further argues that the result will be rates that are not competitive. It refers to comparisons. It further refers to competition with qualifying facilities and other utilities. It suggests that some electric utilities are moving ahead to prepare for more competitive environments.

It closes with a detailed discussion of gradualism. Once again, this particular topic falls under more than one category. I will discuss it in greater length under the rate design heading rather than deal with the interruptible problem here. I will also deal with the ISA question under rate design. I have already discussed the Beth Steel reply brief, concerning this subject, at least preliminarily. I can discuss it further under the rate design heading of rate schedule ISA.

Beth Steel also discusses the interruptible service problem under the heading rate design, commencing at page 31 of its main brief. It discusses the PP&L proposal concerning interruptible service. It suggests a separate interruptible

tariff, as an alternative. It views the PP&L proposal as allowing for an inferior interruptible service within the LP-5 and LP-6 categories. It would reject the PP&L proposed change. Once again, I will discuss this matter under rate design. I provide the Beth Steel position here only because it ties into the general Beth Steel discussion reviewed above. I will consider the Beth Steel contributions when I deal with this matter under the heading of rate design.

CEPFOD provides some contributions to allocation discussion. However, it clearly is focusing on rate schedule RTS. It also provides some input relating to schedule RS. It is concerned about the proposed third block. However, I consider that discussions of these contributions are better done under the heading of rate design, and not here. For similar reasons, I defer discussion of various Sierra Club contributions until rate design is considered. I add that the Sierra Club and other parties have expressed interest in various matters which are not strictly rate design and which will be addressed under a separate heading subsequent to the rate design discussion.

The subject of allocation deserves more attention than it tends to get in general increase proceedings. I include this proceeding under that category. There simply is not time, during hearing or during preparation of the briefs and recommended decision, for a thorough and thoughtful review of this matter. A goal, fundamentally, is to bring all customers, or at least all major classes of customers, to the system average rate of return.

Various other measures of this goal have been provided. See, for instance, the discussion and the footnote at page 20 of the OSBA main brief. However, virtually all parties tend to agree that we should bring the classes all to the same rate of return, eliminating what would be viewed as subsidies.

The matter is complicated by the fact that the Commission seldom gives the rate increase sought by the utility in question. This is a complication because carefully constructed attempts to improve relationships with the classes will not work well under a lesser increase. For instance, a 50 percent higher increase per class will, at a 10 percent general increase, produce 5 percent "movement" toward the overall rate of return. I will not quibble about measures but at least it produces a significant movement, we will assume. The same increase of 1.5 times the overall increase will produce much less, especially in terms of dollars, at an overall increase of 1 percent. Moreover, the thought occurs that we can do more toward getting all customers to the overall rate of return if there is a slight increase than if there is a major increase.

Clearly, a 5 percent increase designed to get better relationships is still a 5 percent increase while a 5 percent increase on top of a 20 percent overall increase makes that last 5 percent rather difficult to accept. Thus, there is some support for the thought that more movement toward overall rate of return can be adopted if there is a small increase, or none at all, than if there is a major increase in the overall revenue allowance.

The problem with all this complicated thinking is that it is complicated. People do not understand what is going on and customers are concerned. In addition, especially with our rather sophisticated rate design, there is the problem of unintended consequences. Especially because the parties are careful to protect and further their own interests, the suspicion arises that some proposals might have strange results, which are not apparent immediately.

At this point, I would rather be safe than innovative. I am accepting the general PP&L proposal, subject to the modifications I recommend in its cost of service study. I trust that these modifications will not seriously impact the fundamental recommendation. I also recommend a traditional scaleback approach if the overall increase is below the one sought. Again, this is safe and will not produce strange results, I hope.

I especially commend OSBA for its attempt to improve the Commission's response to the problem of an increase below that sought by the utility. Much of the OSBA main brief was interesting reading. However, I must confess that I do not fully understand the consequences of these various proposals. To the degree that this can be done, I would recommend that some attempt be made to move more toward the overall rate of return, for the various classes, than would be the case under a straight scaleback approach. However, I have little detailed guidance to offer on this subject. A rate decrease, overall, presents additional problems. I agree with OSBA that some attempt should be made

toward progress in bringing rates of return to the system average. I have reviewed the position taken by the OSBA witness, commencing at page 33 of OSBA's Statement R-1. He acknowledges the problems associated with allocation and negative deficiencies. He fundamentally recommends an extension of his system into negative numbers. He refers to the current discount for interruptible service, which I will discuss under rate design, below. However, he also discusses a general system which he admits is rather complicated.

To the degree reasonably possible and feasible, I recommend that the Commission adopt the OSBA approach to a rate reduction (or very small increase) situation. I suggest that OSBA and the other parties respond to this recommendation, in their exceptions and reply exceptions. I even venture to suggest that a generic approach be taken to this problem of lesser increases and possible decreases. A rate case with little revenue change, overall, might be a good place for significant rate design reform, and allocation reform. This frequently does not occur because of the pressing circumstances and the difficulty in crafting the details.

C. Rate Schedule RS

PP&L commences this discussion at page 251 of its main brief. It observes that it has proposed an RS customer charge of $7.20, a 50 percent increase over the present charge. It states that its cost study shows the relevant cost as $17.51 per customer per month. It also refers to billing and metering costs per

customer as $10.18 per month. It considers this charge it proposes to be a reasonable balance. It mentions that the increase is only $2.40 which, in the PP&L view, would not impose undue hardships on rate RS customers, particularly since costs shifted from the customer charge should be recovered in the first billing block of usage charges.

It points out that the customer charge was set at $4.80 over 10 years ago and argues that it is now outdated. It refers to other proposals concerning this charge. It notes that OTS proposed an increase of $1.10 and that CEPFOD proposed a similar increase. It further observes that OCA opposed any increase.

PP&L also defends its third billing block for rate schedule RS. It states that it has sought to ensure a more equitable recovery of both unrecovered customer-related costs and demand-related costs in the early blocks of the rate, rather than the trailing block. It refers to CEPFOD and OCA opposition.

OTS, commencing at page 135 of its main brief, addresses the residential customer charge. It reviews the background and provides its recommendation of an increase of $1.10, to $5.90 per month, at the overall requested increase. It views this as within the range of other Pennsylvania electric utilities. It also reviews the Company's expressed support for its position. It observes that it supports a much lower increase overall than the Company requested. I agree with OTS that a smaller increase to the customer charge would be appropriate if there is a smaller increase overall.

It continues by addressing various other PP&L positions in support. It suggests that even a $2.40 per month increase could be a hardship. OTS, in its reply brief, commencing at page 62, touches on rate design, cost of service and allocation. It again presents briefly its positions. It then proceeds to further discuss its proposed residential customer charge increase. It refers to its main brief and points out, in addition, that this element of the bill cannot be controlled by the customer.

The OCA residential rate discussion commences at page 305 of its main brief. It discusses both the RS charge and the RTS customer charge of $15 per month. It states that PP&L has failed to justify these substantial increases. OCA associates these charges with metering and billing costs. It refers to precedent. It suggests that PP&L is seeking to recover more than this amount. It suggests that PP&L cost figures include too much and should be reduced. It finds a basic cost of $4.73 monthly. It also finds an RTS cost below the current charge.

OCA too makes comparisons to other utilities. It further criticizes the proposal of another energy block. It refers to its witness's testimony. It suggests that PP&L is seeking to recover more than its customer cost in these early blocks. It suggests that demand charges should not be recovered in the early blocks. The OCA discussion of this topic in its reply brief commences at page 130. It again refers to the testimony of its witness and to some of the numbers involved. It refers to its main brief and adheres to its proposals.

The Sierra Club addresses the residential customer charge, commencing at page 16 of its main brief. Within the same discussion, it also addresses various related matters. It views this element as representative of a monopolistic aspect of service. It further discusses limited fuel supply and other matters. It seems to support increasing consumption charges, with increasing usage. It refers to the possibility of increasing competition for electric service. It also refers briefly to the RTS rate.

PP&L starting at page 108 of its reply brief, responds to CEPFOD, OTS, OCA and the Sierra Club. The main response to the Sierra Club is in a footnote at page 109. PP&L continues with a discussion of the OCA arguments relating to basic customer costs. PP&L also refers to the attacks on the third billing block. It defends its third block as logical and properly designed. It characterizes the first block as, to some degree, a customer charge block and the second block as providing for recovery of a substantial portion of demand costs. It refers to the Company's risk of non-recovery of fixed costs.

I view the proposed customer charges as supported by cost studies and as reasonable, at least in theory. I recommend a limitation on the increase to 35 percent, something like the rate of inflation over the last 10 years and approximately three times the overall increase, for purposes of customer acceptance, and related concerns. This should be scaled back with lesser increases, as would be the proposed 50 percent increase. I do not recommend a similar limitation for the RTS customer charge which,

as proposed, is more modest. I also accept the proposed third block of PP&L. This appears to be a reasonable ratemaking step and I find little basis for opposition, on my part.

D. Rate Schedule RTS

I have dealt with the customer charge under my discussion of rate RS above. In this, I essentially agree with PP&L.

PP&L commences its discussion of rate schedule RTS at page 254 of its main brief. It states that this rate schedule is available to customers who install certain electric thermal storage systems equipped with timing devices that permit PP&L to pre-set the time during which electric heat and/or hot water heating occurs. It further states that, relative to rate schedule RS, this rate involves a lower per kwh charge in a single billing block, a higher monthly demand rate and additional demand charges for usage over 2 kw during peak periods. It continues, at pages 255-256, with the following background:

> Rate Schedule RTS was developed as a load management tool during the early 1980s, when the Company sought to reduce peak load growth. The thermal storage technology offered the opportunity to shift heating load from the peak period of the day through the use of timing devices. Thermal storage provided significant advantages over other load management tools (PP&L St. 8-R, pp. 13-15). In particular, the Company's peak load growth in the mid- to late-1970s and early 1980s displayed a growing morning peak problem. Thermal storage would allow the Company to shift heating load to the evening, alleviating the morning peak (PP&L St. 6-R, pp. 10-11; Exh. JJS-10 and JJS-11; Tr. 2123).
>
> Rate Schedule RTS was introduced in 1984 and attracted approximately 14,000 customers by early 1995. By the late 1980s, the Company

> became aware that a general shift in peak usage towards the evening by non-RTS customers would, over the long term (after 1995), create an evening peak on PP&L's system, which would reduce the benefits of the RTS rate (PP&L St. 6-R, pp. 3-7). Consequently, the Company began phasing out advertising promotions and grants for thermal storage customers in 1991 and by 1995 it had entirely discontinued them. As a result, fewer and fewer customers have subscribed to the RTS service in recent years: 806 in 1993, 549 in 1994, and only 145 in the first quarter of 1995 (PP&L St. 6-R, p. 8; Ex. JJS-9).
>
> In addition, the Company commenced a pilot program to study the effect and feasibility of installing direct dispatch controls on RTS units, permitting the Company to use real-time pricing and improve the relative revenue contribution from RTS units (Tr. 723-27; PP&L St. 8-R, pp. 17-18).

PP&L refers to the described situation and the concerns expressed by other parties. It then proposes its modification to this rate schedule, as follows: (1) to accept new customers for the rate schedule only until December 31, 1995, (2) to thereafter allow eligible persons to use a new rate schedule to incorporate newer technology and appropriate terms, conditions and rates, (3) to provide service to existing RTS locations through the life of the existing thermal storage units, and (4) to propose no reduction in the existing 2.3¢ per kilowatt hour differential between RTS and RS customers before December 31, 1999.

PP&L further states that this proposal is broadly similar to that of OCA and was generally satisfactory to the OCA witness. PP&L bases its proposal partly on changing load patterns and changes in technology. It also views this as a good balance of the interests of all customers. It acknowledges that RTS has a low

rate of return and proposes no further expansion under this category. It further states that no basis exists for an investigation of rate RTS. It acknowledges the expressed customer concern about this rate and the proposed changes to the rate. PP&L then proceeds with a brief discussion of public input hearings, including a reference to a misleading company mailing that had inadvertently overstated the level of the RTS rate increase. PP&L also discusses recovery of investments. See, especially, page 260.

PP&L next discusses the CEPFOD problems with rate RTS. It reviews the fundamental position taken by CEPFOD and the background of the relationship between PP&L and CEPFOD. PP&L continues its arguments under the headings that this case is not about displacement of oil heat by RTS heat, that PP&L prudence is not an issue and that the oil dealers completely misrepresent the history of rate schedule RTS. It repeats some of its background material. It further states that the actual RTS customer base is much smaller than had been projected in 1987.

PP&L argues that rate schedule RTS does contribute to fixed cost and does improve the Company peak load profile. It refers to case law. It does mention that there is a negative return of the RTS class on a fully-allocated basis and states that this is a matter of concern for PP&L. It further states that this is a recent development stemming from the advent of evening winter peaks. It refers to the closing of this rate. It also refers to the quality of service associated with rate RTS, which it indicates

is somewhat low. In closing, it refers to various additional CEPFOD arguments.

OTS addresses this topic at pages 139-140 of its main brief. It describes rate schedule RTS and the associated charges. It further states the position of its witness that, if PP&L is granted an increase in this proceeding, the increase should first be recovered from this rate schedule. OTS continues that its witness testified that the increase in RTS should be applied even if the overall revenue is reduced.

In a discussion starting at page 140, OTS proposes that the Commission initiate an investigation of rate schedule RTS. It expresses concern that some customers have been induced to go to this service with overly optimistic promises. It refers to testimony at public input hearings. It also refers to questions raised by its own witness. It refers to a PP&L mailing and to a follow-up letter. One concern is investment by recent RTS customers. OTS again addresses this matter in its reply brief, commencing at page 65. It summarizes several questions worth investigating, in the opinion of OTS. It refers to PP&L responses. It also refers to calculations of pay-back periods for the thermal storage investments.

OCA addresses this matter, commencing at page 296 of its main brief. It refers to significant concern about this rate schedule. It also states that the cost study shows a negative rate of return for this class and that PP&L has proposed a 17.39 percent increase for these customers. It observes that this is higher than

the increase proposed for RS customers. It further points out that some RTS customers will experience higher increases. It views these changes as improper, given the circumstances. It proceeds to provide some background about this rate. It also refers to public input testimony. As it indicates, customers made significant capital investments relating to this service. It provides details relating to public input testimony and to letters made part of the record.

OCA further points out that this rate did not produce the results intended by PP&L. OCA would not unduly emphasize the cost of service results, considering the nature of this service. It proposes modifications, providing details. See, especially, page 301. It observes that PP&L, in rebuttal, adopted many of the OCA's witness's recommendations. It points out differences.

OCA details two points of disagreement. First, it would not set a date certain, such as December 31, 1999, for a cut-off of the rate differential proposal. It would leave the matter open-ended, with PP&L free to propose the alternative treatment. I recommend this minor OCA modification. The second disagreement refers to the timing for closing of the rate. It would have the rate close with the issuance of the Commission Order. PP&L seeks some time for customer response. It states that, in the alternative, PP&L be directed to fully inform applicants of the conditions relating to this rate, prior to their signing up for service. On this other relatively minor point, I accept the PP&L

delay time but do recommend that the notice be required, as outlined by OCA.

OCA disagrees with the CEPFOD proposals, because they may unreasonably burden RTS customers. It refers to the CEPFOD recommendations that the Commission eliminate the RTS rate and direct PP&L refunds. It reviews alternatives suggested. It addresses some of the CEPFOD details. It supports its own proposals. It would not punish RTS customers for PP&L miscalculations but would act to mitigate future revenue shortfalls.

The OCA reply brief discussion of this matter commences at page 127. It indicates substantial agreement between PP&L and OCA. It views the CEPFOD recommendations as unduly burdensome to RTS customers. It would reject the CEPFOD recommendations.

This aspect of the CEPFOD RTS discussion commences at page 16 of its main brief. CEPFOD also provides a brief discussion of residential rate design, including customer charges, commencing at page 28. Its primary recommendation is to abolish rate RTS and to require credits by PP&L to RTS ratepayers. It refers to the testimony of its witness, relating to the origins of this service and substantial PP&L documentation. It views the matter as blatantly market expansive. It views these customers as high users of relatively cheap electric service. It further views the matter as unfair competition in the space heating market. It provides details.

It asserts that PP&L is seeking to maximize sales. It provides dollar amounts relating to promotional efforts. It refers to massive subsidies to this service. It suggests that PP&L should not be allowed to harm other ratepayers now, to make up for its own miscalculations. It views CEPFOD members as having been unfairly victimized by rate subsidization, through the loss of potential fuel oil customers. It also would not shift losses to other PP&L customers. It suggests that PP&L should have taken steps previously to modify this rate. It refers to various PP&L studies. It again refers to a goal of increasing electric usage, in response to excess capacity situations.

It asserts that PP&L has known about a peaking problem for years. It characterizes PP&L actions as imprudent. It suggests that, when PP&L offered rate RTS, it believed that sales would increase through the rate subsidy involved and that losses could be carried by other customers. It suggests that its assertion of imprudence has not been refuted by PP&L. It characterizes PP&L tactics as unfair to fossil fuel marketers. It provides its recommendations concerning termination of the rate and a credit of $50 per month for a three to five year period. It would have this credit borne by PP&L itself and not by any of the customers. It views the target of RTS service as fossil fuel providers.

CEPFOD further suggests that, if RTS is not abolished, the rates be increased no less than what PP&L proposes. It indicates some support for the OTS proposal that the full increase

be placed on RTS customers, no matter what the overall increase by PP&L. It proposes that the availability of the rate be closed. It outlines further recommendations. It also refers to PP&L responses, on rebuttal. It again characterizes PP&L actions as imprudent.

Starting at page 28, CEPFOD addresses certain rate design issues for RTS and RS service. It recommends no increase in the RTS customer charge and a smaller increase to the RS customer charge. It provides details and points out that residential customers have no practical alternative for electric service. It also recommends rejection of the third block for the RS rate. It would not widen the tailblock differential.

The CEPFOD reply brief addresses mainly rate RTS, but also addresses the RS customer charge and third block. I discuss the RS matters above but will refer to the CEPFOD contributions here.

CEPFOD reviews the positions taken by the parties, including its own positions. It suggests that PP&L should not be rewarded for its imprudence, by allowing it to shift the RTS subsidy to other customers. It characterizes its position as being based on several undisputed facts. It first states that PP&L knew that the RTS rate was a load management failure during 1987. It further asserts that rate RTS is a subsidized service. It states that rate RTS increases the evening peak for PP&L.

CEPFOD goes on to discuss the competition aspect with oil and gas suppliers. It refers especially to price competition. It

refers to the negative rate of return and characterizes this as not a recent development. It also refers to incremental cost. It suggests that rate RTS does not contribute to fixed cost recovery. It also suggests that the rate does not recover fuel costs. It goes on to refer to timers and various developments. It regards PP&L modifications as too late. It also characterizes its own recommendations as fair to all customers.

Commencing at page 11, CEPFOD refers to the third RS block and to the RS customer charge increase. It indicates that demand charges should be paid by heating customers. It provide additional numbers relating to blocking and the customer charge. It takes the position that they are not cost-supported.

The PP&L reply brief discussion of rate schedule RTS commences at page 112. It responds to CEPFOD. The underlying PP&L position appears to be that CEPFOD is unfair regarding history and remedies. It refers to its initial brief. It also indicates the view that many of the points of CEPFOD are not relevant to the matter. PP&L indicates that RTS was a load management tool and did have some success. It refers to various CEPFOD exhibits. It indicates, among other things, that this rate helped achieve important load management objectives.

PP&L argues that it did not discover that the program was a failure in 1987 and subsequently ignored the problem until today. It states that a 1987 study had predicted that promotion of RTS could continue through 1994. PP&L asserts that the record does not support the assertion of diversions from oil, by conversion. It

further indicates that other utilities and the oil dealers were taking promotional steps. It states that the best course of action is the proposal by PP&L, supported by OCA.

PP&L indicates the view that RTS customers should be better off than RS customers, even with the rate increase. It states its proposal as one to close the rate schedule, to preserve existing rate differentials for at least a minimum period, to protect the interests of existing rate schedule RTS subscribers and to work actively toward a new thermal storage rate schedule, employing the latest technology.

Upon review of this matter, I recommend adoption of the PP&L/OCA proposal, subject to the discussions above. I appreciate CEPFOD concerns and agree that the Commission should be aware of competitive problems associated with utility actions. However, I view the CEPFOD case as overstated and would not take the actions proposed. I discern no substantial showing of abuse of competitive advantages, under the circumstances. PP&L has substantially modified its position relating to this rate and I accept the modification, as indicated. I tend to agree with CEPFOD that rate schedule RTS is not a particularly successful experiment but do not view it as a total failure. I add that pricing is a very difficult topic.

I acknowledge the negative rates of return here but also consider the possibility of an incremental analysis, which could be appropriate. On the whole, I accept the position that PP&L is seeking to address its own concerns and the interests of its

customers. Unquestionably, PP&L is competing for market share, to some degree. However, I am unwilling to impute significant predatory intent, by PP&L, against the fuel oil dealers.

E. Interruptible Service

The PP&L discussion under this topic heading, rate schedules LP-4 and LP-5 and LP-6, interruptible option, commences at page 270 of its main brief. OTS and OCA do not specifically address this matter, within the rate design topic heading. PPLICA and other parties do address this topic.

PP&L states, starting at page 270, that the debate over the value and level of interruptible rates for large customers was a significant issue in this proceeding. I agree. PP&L points out that the industrial customers argue based on general claims of competition, relative rate increase levels and other matters. See the PPLICA preamble starting at page 4 of its main brief, which I discuss above. PP&L points out the many factors which must be balanced, concerning this sort of matter.

PP&L first addresses the claim that its interruptible rates are uncompetitive. It refers to arguments by Beth Steel and PPLICA. PP&L indicates that electricity might not be the deciding factor in many cases. It indicates the view that electricity is less crucial than some of the other parties would have it. PP&L also indicates that it has incentive and methods available to prevent competitive load loss. It refers, among other things, to the competitive rate rider (CRR) which provides for individually-calculated rates responsive to individual companies'

competitive challenges. It views these customer-specific competitive options as preferable to the across-the-board rate reductions associated with the interruptible rates. It suggests that the interruptible rates prove to be too generous. See footnote 83 at page 273.

PP&L further discusses the arguments of the industrial parties and states that PP&L itself has a critical interest in preventing these customers from reducing their purchases of electricity from PP&L. PP&L further argues that its rates are not out of line, providing its own comparisons. Finally, PP&L argues that the rate levels it proposes are just and reasonable. It refers to the rate decreases for interruptible customers in 1992. It further states that, relative to 1984, the interruptible customers will receive a 5 percent rate decrease in this case. It characterizes their rates as still far lower than rates available to firm large power customers.

It further refers to historical development. It states that the interruptible credit was set at a higher level than was justified by cost, in the hope of encouraging economic development and preventing load loss. It states that it filed to close the rate during 1994 and refers to the related Commission Order. It emphasizes the return to status quo in a footnote at page 279. It argues against the allegation that this filing imposes a rate shock on these interruptible customers. It states that PPLICA would prefer, in effect, to freeze in place a mistaken interruptible credit, as a permanent rate benefit. It further refers to the

Commission Order written in response to the 1994 request to close this rate.

PPLICA discussed some aspects of interruptible service litigation within the context of its allocation discussions, at approximately page 64 of its main brief. I have already reviewed this discussion, above, and offered my views. PPLICA continues its discussion of interruptible rates at page 74 of its main brief, with what could be viewed as more specifically rate design discussions. I will proceed to review these further discussions and then review the PP&L response, in its reply brief.

PPLICA states that, under the PP&L proposal, there will be essentially four different rate schedules contained within the current LP-5 revenue class: LP-5 firm, LP-5 interruptible, LP-6 firm and LP-6 interruptible. It characterizes the two services, firm and interruptible, as service to two different types of customers. PPLICA further observes that the LP-6 schedule is for customers with average demand in excess of 10,000 kilowatts. It further states that PP&L has eliminated the separate interruptible tariff under which many PPLICA members took service, and has replaced it with an interruptible credit which is applied to firm rates. This credit is based on the cost of a new combustion turbine peaking unit. The proposed credit is $6 per kilowatt per month and $8 per kilowatt per month, depending on notice requirements.

PP&L has proposed to alter the interruptible rate design, by removing the current applicable demand/energy block rates. The

proposed design is essentially a flat kilowatt rate with an adjustment for load factor. Under the current tariff, a demand charge is applicable to the billing kilowatts and then two energy blocks (plus the ECR) apply. PPLICA proceeds to compare the two rate designs. It further states that PP&L has also proposed a 500 megawatt cap on interruptible load. PPLICA further states that, given that the effective amount of interruptible load for the cap has been identified as 460 megawatts, only 40 megawatts of interruptible load are available. It drops a footnote to indicate that the matter of adding incremental load beyond the cap should be clarified. It makes reference to transcript pages 810-811, which do provide some clarification.

PPLICA goes on to observe that the overall LP-5 revenue increase is shown as 15.45 percent, as compared to the overall system average increase of 11.7 percent. It further observes that this includes a 27 percent increase for interruptible customers.

PPLICA states that it is adamantly opposed to PP&L's interruptible rate design changes. It states that PP&L has effectively transformed the interruptible service into a firm service rate with a load insensitive credit. It views this as a dramatic change in rate design philosophy, causing an unprecedented increase in rates without any meaningful justification. It views the change as going against current competitive trends, the principle of gradualism and the recognized sensitivity of this state's economy.

PPLICA recommends three schedules, LP-5 firm, LP-6 firm and LP-5/L-6 interruptible. It states that the basic PP&L design for the two proposed firm rate schedules is reasonable but that the PPLICA recommended revenue increase should be used. PPLICA also proposes to apply the 1.5 times system average increase for the interruptible rate. This would be an overall increase to the interruptible customers of 17.55 percent, based on the entire revenue requirement being met. It characterizes this as a substantial increase. It provides a schedule detailing information. It states that the overall LP-5 revenue class (including LP-5 and LP-6 plus the proposed LP-5/LP-6 interruptible) would receive a 10.9 percent increase. PPLICA also indicates that it recommends, for rate design, an interruptible credit that is approximately the same as that proposed by PP&L.

At page 78, PPLICA turns to the PP&L "resource value approach" to interruptible rates. This assumes that interruptible service is a substitute for peaking capacity. The rates are based on value while other customers have their rates, presumably, based on embedded cost, in accordance with standard cost of service studies. PPLICA would view this as making interruptible load a resource to be purchased by PP&L rather than a low reliability service offered by PP&L. PPLICA opposes this treatment of interruptible service. It would prefer rates based on cost of service. Presumably, this would be cost of service without the capacity element included.

PPLICA continues with the view that interruptible service is lower quality service. It also characterizes the situation proposed by PP&L as the selling back of interruptible service capacity by the customers to PP&L. PPLICA views this approach as faulty. It discusses active load management, the value of capacity and other related matters. It again refers to its proposal that the increase be limited to 1.5 times system average. It further argues for cost of service ratemaking.

In addition to responding to PP&L proposals, PPLICA refers to the OCA resource value approach. Its criticisms of the OCA alternative are similar to the criticisms of PP&L's approach. Opposition is expressed to the market-based valuation method. In addition to these discussions, PPLICA offers, at page 83, a brief response to the Sierra Club's recommendation that comprehensive energy audits be required. PPLICA refers to an ongoing investigation into electric utility demand side management programs. I tend to agree with PPLICA that that proceeding would be a better forum for this issue in this rate proceeding. In any case, I do not recommend adoption of this Sierra Club proposal. It goes somewhat beyond the scope of this rate proceeding and is relatively untested.

The corresponding Sierra Club discussion starts at page 18 of its main brief. The Sierra Club states that the Commission should require, as a pre-condition to eligibility for any promotional or discount rate, including economic development rates, that a business customer be initially and periodically

certified, through an approved independent auditor, that it has undertaken to cost effectively maximize the energy efficiency of its operations, as measured for the period that the rate is expected to be in effect for it, or that it has in place an approved plan for such cost-effective measures. It refers to the testimony of its witness. It has further suggestions about absorbing the revenue and about energy audits. It goes on with discussions of demand side management.

PPLICA responds to Sierra Club, starting at page 49 of its reply brief. It characterizes the argument as poorly developed. It again refers to another proceeding as the appropriate forum for this proposal. I tend to agree. In any case, I do not recommend adoption of the Sierra Club proposal.

The main PPLICA response concerning interruptible rates begins at page 3 of its reply brief. It indicates disagreement with PP&L's view of its leadership relating to economic development initiatives. It focuses attention on the proposed rate increases for interruptible customers. It would not look back 10 years to the last case where there was no interruptible service, as is presently structured. It views the PP&L initiative as not a good way to meet competition.

PPLICA views its own proposal as one which reduces cross-subsidization and which moves all rates toward the system average. It also discusses the possibility of self-generation of electricity by customers. At page 6, it turns to the valuation method of ratemaking for interruptible service. It does not agree

with PP&L that the PP&L proposal is a reasonable, middle-of-the-road position. It draws a distinction between cost allocation and valuation ratemaking. It views PP&L as confused concerning these matters. It further discusses its 1.5 times cap proposal. It indicates its view that the PP&L proposal is out of balance, unjust and unreasonable. It discusses competition and competitive threats. It views the PP&L position as not striking the proper balance. It discusses the PP&L theory and impacts on PPLICA members.

It further discusses the PP&L EDI/IDI credits and alternatives to the existing interruptible rates. It obviously would prefer the interruptible rate option to various possibilities of alternatives. It also states that PP&L has mischaracterized the PPLICA proposal. It states that it is not recommending lower rates but only rates lower than those proposed by PP&L. It further discusses the Commission action to close the interruptible offering. It distinguishes this from the current proposal to increase rates. It would further distinguish rates for 1984 or even 1992. It views the interruptible program as a good program still and disagrees with the PP&L argument that the interruptible proposal was flawed even in 1992.

PPLICA states that the interruptible program has worked. It closes with a reference to its 1.5 times increase cap proposal and movement toward a system average rate of return. It also refers to the principle of gradualism.

Beth Steel also discusses these matters, in its main brief. These discussions were provided under the headings of cost of service study and revenue allocation. They are discussed above, in this Recommended Decision. It disagrees, as does PPLICA, with proposed PP&L interruptible rate design.

The PP&L discussion of this topic, in its reply brief, commences at page 118. It refers to various words chosen by PPLICA in its arguments and characterizes them as fervent rhetoric. PP&L then states that the proposed rates simply reflect the Company's decision to return to the situation which existed before the large rate discounts given to interruptible customers in 1992-1993. It states that the 1992 interruptible service rate reduction proved to be overstated. It further states that, earlier this year, the Commission agreed and approved the closure of these rates. PP&L indicates the view that this action, in this rate proceeding, seeks to fully implement the closure of these rate offerings.

PP&L would characterize PPLICA as seeking to freeze in place the now-rejected interruptible rate offering. PP&L refers to three main arguments: (1) that the past is irrelevant, (2) that pre-1992 industrial customer rates were firm and are not comparable to these offerings and (3) that the Company's interruptible service rates ignore competition. It further states the view that these arguments have no merit.

PP&L indicates the view that PPLICA members have not been treated unfairly. Again, PP&L goes back to 1984 and views the larger picture involved. It states that interruptible service