Petitioner's Exhibit AJV

INDIANA-AMERICAN WATER COMPANY, INC.

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INDIANA UTILITY
REGULATORY COMMISSION

IURC CAUSE NO. 43187

DIRECT TESTIMONY

OF

A. JOSEPH VAN DEN BERG

ON

E-CIS AND CUSTOMER SATISFACTION CENTER

SPONSORING

PETITIONER'S EXHIBIT AJV -1

THROUGH

PETITIONER'S EXHIBIT AJV-13

Petitioner's Exhibit AJV

DIRECT TESTIMONY

OF A. JOSEPH VAN DEN BERG

CAUSE NO. 43187

1 **Q. Please state your name and business address.**

2 A. My name is A. Joseph Van den Berg. My business address is 8283
3 Greensboro Drive, McLean, VA 22102.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am a Partner with Booz Allen Hamilton.

6 **Q. Would you please summarize your academic and professional**
7 **background?**

8 A. I hold a Bachelor of Sciences degree in Mechanical Engineering from the
9 Virginia Polytechnic Institute and State University, and a Masters of
10 Business Administration in Finance and Investments from George
11 Washington University. Post graduation, I worked for Potomac Electric
12 Power Company before joining the Edison Electric Institute where, as a
13 Director, I was responsible for regulatory and marketing activities related
14 to the use of energy. In that capacity, I directed activities related to least-
15 cost planning, demand-side management, new technology investments,
16 and environmental externalities. I have made presentations to, and have

been active with, the National Association of Regulatory Utility Commissioners. I have testified before the U.S. Department of Energy on a number of matters including energy regulation, energy economies, environmental impacts, and technology communications.

At Deloitte Consulting, I directed several engagements focused on developing a customer care and operations strategy resulting in improved cost performance from the bottom quartile to the top quartile. Strategies implemented included standardizing business processes, simplifying governance and work activities, and implementing technology enablers. Additional scope has included leading strategy development for the potential outsourcing of customer care functions. Related roles include scope definition, negotiation preparation and strategy, contract structuring, value proposition determination and business requirements creation. I have also been involved in optimizing processes for retail and delivery segments. Activities have included management of marketing, sales and service technology integration platforms with the appropriate design of business intelligence transfer protocols, cost allocation requirements, process handoffs and interfaces, and roles and responsibilities of marketing and sales functions. I was the Strategy and Operations and Customer Relationship Management ("CRM") Lead Partner for the Energy and Utilities practice within Deloitte. Since joining Booz Allen Hamilton, I have focused my efforts in the customer operations arena, specializing in

1 assisting companies achieve improvements in customer service,
2 performance and costs.

3 In addition, I have participated in numerous other utility consulting
4 engagements in the area of merger and acquisitions, corporate growth,
5 diversification, restructuring, organizational analysis, business process
6 reengineering, strategic planning and strategic marketing. I have been the
7 joint witness for merger applicants in state proceedings.

8 **Q. What is the purpose of your testimony in this rate case involving**
9 **Indiana-American Water Company?**

10 A. I was engaged by Indiana-American Water Company, Inc. ("Indiana
11 American") to study and evaluate the cost incurred by Indiana American to
12 implement Orcom System, Inc.'s ("Orcom") Enhanced Customer
13 Information System ("E-CIS") software program. I have also been asked
14 to evaluate the likely costs that would have been incurred in today's
15 circumstances had Indiana American maintained its Customer Service
16 Center in Richmond, Indiana and to compare those likely costs to what
17 Indiana American is actually incurring as a participant in American Water
18 Works Customer Satisfaction Center ("American CSC").

19 **Q. Please describe the activities you performed that helped enable your**
20 **examination and evaluation of these issues.**

21 A. Prior to being engaged by Indiana American, I was hired by American
22 Water Works Company, Inc. ("AWW") in July of 2003 to conduct a

1 financial and performance review of the American CSC. Since that time, I
2 have been engaged by other AWW subsidiaries, including Missouri-
3 American Water Company, to evaluate its customer care costs related to
4 the American CSC and Orcom E-CIS solution. As part of that evaluation, I
5 toured both the Alton and Pensacola facilities and was exposed to the E-
6 CIS software and American CSC's call center technologies. With respect
7 to my study of Indiana American's customer care operation, my Booz
8 Allen Hamilton team and I undertook an extensive data collection process,
9 including interviews with employees in various roles with the American
10 CSC in both Alton and Pensacola and the American Water Works Service
11 Company ("AWWSC").

12 **Q. Are you sponsoring any exhibits discussed in your testimony?**

13 A. Yes. The following Exhibits are referenced in this testimony and included
14 at the end:

15 AJV-1 – Orcom E-CIS Upgrade Cost Distribution by State
16 AJV-2 – Orcom E-CIS Upgrade Costs
17 AJV-3 – Orcom E-CIS Upgrade Costs Over Time
18 AJV-4 – Screen Shot, CMS Report of Real Time Call Monitoring/Queue
19 Management
20 AJV-5 – Screen Shot, CMS Report of Agent Performance by Date
21 AJV-6 – Screen Shot, H2O Online State Specific Information
22 AJV-7 – Screen Shot, Instant Data Access

1 AJV-8 – Screen Shot, Blue Pumpkin Scheduling Tool

2 AJV-9 – Richmond to CSC Cost Comparison

3 AJV-10 – Change in Customer Call Volumes

4 AJV-11 – Richmond O&M Costs, 2003 Baseline and 2006 Escalated

5 AJV-12 – Customer Service O&M Costs

6 AJV-13 – O&M Cost-per-Call Comparison

7

8 **Q. Was all of the work performed and were all of the exhibits prepared**

9 **by you or under your supervision?**

10 A. Yes.

11 **Q. Could you please summarize your testimony?**

12 A. Yes. In my testimony I will first explain the costs incurred upgrading

13 Indiana American to Orcom E-CIS software, demonstrate that the cost of

14 the upgrade was consistent with the industry as a whole, compare the

15 actual costs of the new systems with a forecast of what the cost to the

16 customers would be had Indiana American tried to update its existing

17 software and demonstrate the importance of investing in customer

18 information systems. As a part of this analysis, I will attempt to answer the

19 two questions the Commission posed in its Order issued in Cause No.

20 42520 pertaining to the costs that have been allocated to Indiana

21 American. Second, I will determine the likely cost that Indiana American

22 would be incurring today to operate its own call center in Richmond and

23 will compare those costs to the actual costs of participating in the

American CSC. As a part of this analysis, I will demonstrate the benefits of American CSC, including a lower cost-per-call and qualitative benefits experienced by Indiana American's customers that are difficult to quantify and measure but add to the service experience of the customers.

Orcom E-CIS Software

Q. You indicated that you would be providing as part of your analysis the costs Indiana American would have incurred to update its existing software. Was there a need to update the existing system?

A. Yes, and in the Commission's Order in Cause No. 42520, the Commission found that Indiana American had "presented sufficient justification for the need to upgrade to the E-CIS database."

Q. Since the Commission found that Indiana American had justified the decision to upgrade to E-CIS, what issues remain?

A. Even though the Commission found that the decision to upgrade to E-CIS was justified, the Commission did not allow recovery of a significant portion of the costs of converting to E-CIS. The Commission noted that it was "unable to determine with any specificity the identity of the additional products and/or services that caused the total price [of E-CIS] to increase from $7,326,422 to $71,416,845." Further, the Commission stated that Indiana American did not "satisfactorily explain[ ] why it is more expensive for Indiana-American to go live with E-CIS as one (1) of twenty two (22) companies with which to share the costs, than it would have been as one

1 (1) of only eight (8)." The Commission allowed only $659,378 for inclusion
2 in rate base. In my opinion, it was inappropriate to disallow the remainder
3 of the cost.

4 **Q. What ratemaking treatment associated with the E-CIS software**
5 **implementation is Indiana American seeking in this case?**
6 A. Indiana American is seeking to include in original cost rate base $6.47
7 million associated with the E-CIS project. As shown by Petitioner's Exhibit
8 AJV-1, this is Indiana American's share of the $73.7 million cost of the E-
9 CIS project. Petitioner's Exhibit AJV-2 shows the break down of these
10 costs.

11 **Q. Can you respond to the Commission's concern why the costs of E-**
12 **CIS increased from $7,326,422 to its final cost?**
13 A. Yes, I can. I must first point out that there are a couple of basic
14 misunderstandings of the 1996 Orcom agreement. As is alluded in the
15 Commission's Order, much of the confusion results from the fact that most
16 of the evidence concerning the Orcom contract was received during live
17 corrections to direct testimony, live supplemental rebuttal testimony to
18 respond to the live corrections, and cross-examination. AWW never
19 expected to be able to upgrade to the Orcom E-CIS for a total cost of
20 $7,326,422. That figure is not explicitly set forth in the Orcom contract.
21 The Orcom agreement specifies a cost for the Orcom software and billing
22 rates and maximum numbers of service hours that Orcom was willing to

1 commit to the project absent change orders. In no respect did Orcom
2 commit that AWW would be able to complete the installation of E-CIS for a
3 total cost of $7,306,422 (or any other figure, for that matter). That cost
4 figure would have been an unreasonable estimate that correlates to a cost
5 of $2.42 per customer for Indiana American, while a CIS implementation in
6 the utility industry is significantly more, ranging anywhere from $25 to
7 $100 per customer. The $7,326,422 figure represents only the amount
8 that was to be paid to Orcom for the software and the specific set of hours
9 committed and ignores change orders and other external and internal
10 costs to AWW dedicated to the integration.

11 **Q. What about the language of the agreement from which the**
12 **Commission inferred that the contract provided for "go-live" at a**
13 **cost of $7,326,422?**

14 A. Again, nothing in the Orcom contract states that AWW would be able to
15 "go live" for that figure. The Orcom contract assumed by its terms that the
16 integration would be accomplished internally with AWW resources. In
17 1996, Orcom Systems was contracted to provide a CIS system for AWW.
18 The process was initiated with the expectation that AWW would have
19 sufficient resources and technical expertise to assist Orcom in customizing,
20 implementing and integrating the new CIS. Indeed, the contract requires
21 AWW to establish a team of experts for these purposes to work with
22 Orcom. Obviously, AWW's own internal integration costs would not be
23 covered by the Orcom contract. AWW began the investment in 1996 by

1 dedicating an internal team, as stipulated in the original Orcom contract, to
2 work with Orcom on the configuration and implementation of the ECIS.
3 Through 1999, $16 million had been spent. The project continued under
4 this leadership, but AWW realized it did not have the internal resources or
5 expertise necessary to successfully complete the E-CIS configuration and
6 installation on its own. For the first eight months of 2000, the AWW team
7 re-evaluated the need for outside expertise. As can be seen in
8 Petitioner's Exhibit AJV-3, there was a decrease in project-related
9 expenses during this time.

10 **Q. What was the result of the re-evaluation of the E-CIS project?**

11 A. The increase in the investment during the last four months of 2000 and
12 over the next four years resulted from the review of the progress to date,
13 including third party input, and the realization that a more intensive effort
14 would be required to complete the E-CIS implementation. This resulted in
15 a decision that efforts should be coordinated and a resultant request for
16 proposal for integrated services was issued. In 2001, Accenture (formerly
17 Andersen Consulting) was selected to partner with AWW and Orcom to
18 assist in the installation, configuration and testing of ECIS. Over the
19 course of the next few years, their work included development of the
20 application functionality required to standardize the Orcom platforms and

1 providing functional configuration requirements allowing Orcom to support
2 improved business processes (i.e. Orcom reporting requirements.)[1]

3 **Q. Did AWW's re-evaluation result in an unreasonable cost for the**
4 **installation of E-CIS?**

5 A. No. In fact, the final project expenses are in line with industry averages.
6 Recall that Indiana American is seeking to include in rate base $6.47
7 million in costs of implementation of E-CIS. Industry research performed
8 by TMG Consulting[2] (a firm specializing in assisting utilities in determining
9 the costs of CIS implementations, both insourced and outsourced
10 solutions) demonstrates Indiana American would have expected to pay as
11 much as $110 per customer (or almost $30 million) for a full CIS
12 implementation. The first $30 per customer would be spent on vendors,
13 consultants and integrators for hardware, software and services. Another
14 $30 per customer would be spent on payroll costs and additional out-of-
15 pocket expenses for items such as overtime pay, bonuses, temporary
16 staffing, project space, training facilities, etc. required during the
17 implementation phase. Finally, if Indiana American opted for extended
18 CIS capabilities, such as bill production, change management, and data
19 warehouse, it would have expected to pay $30 per customer for extended
20 services and $20 per customer for extended products.

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[1] Accenture Consulting Services Agreement, June 2001
[2] UtiliPoint International. White Paper: Effective Project Management Ensures a Positive Return; On-Time and On-Budget Customer Care/CIS Implementation No Longer Just Wishful Thinking, March 23, 2004.

1 In 2005, Meta Group conducted a study which estimated the average cost
2 to install a CIS at $44 per customer. Costs varied by utility size; small
3 utilities averaged $68 per customer, medium utilities $54 per customer,
4 and large utilities $34.88 per customer.[3] Being a small utility, these
5 estimates project a price of installing a CIS system for Indiana American at
6 $18.4 million, based on Indiana American's 2003 customer base of
7 272,000. Considering the economies of scale reflected in this research,
8 AWW's total expense considering a 2003 customer base of 2.9 million
9 would have been $101 million, $9.5 million of which would have been
10 allocated back to Indiana American.

11 Based on the industry benchmarks, I estimate that the current costs for a
12 CIS implementation for a company the size of Indiana American and with
13 similar functionality, would cost in excess of $10 million. These estimates
14 are validated by my client experiences, proprietary knowledge of non-
15 clients costs, and internal estimates of proposal-quality costs. Indiana
16 American implemented its Orcom E-CIS for much less.

17 **Q. What about the Commission's concern that E-CIS costs increased**
18 **simply because Indiana American went live with E-CIS as one of**
19 **twenty two companies rather than only one of eight?**
20 A. This concern results from the second basic misunderstanding of the
21 original Orcom agreement. The original Orcom agreement was intended

[3] Moore, Cynthia and Sumic, Zarko. Energy Utility IT Spending in 2005. Gartner Industry Research. March, 2006

1 to support the installation and use of the "Software on eight IBM AS/400
2 computers." These are eight servers for the entire AWW system, not eight
3 companies. In fact, Indiana American was one of 15 companies at that
4 time. Those 15 companies included AWW's utility subsidiaries in
5 Pennsylvania, New Jersey, Indiana, Illinois, West Virginia, Massachusetts,
6 California, Virginia, Tennessee, Kentucky, Iowa, Ohio, Missouri, Michigan
7 and Maryland. Indiana American's share of the total cost did not grow due
8 to allocation of the costs among a greater number of companies. In fact,
9 and as I have already explained, the cost per customer declines with a
10 larger customer base. If anything, Indiana American's share of the total
11 cost today is significantly less than it would have been had AWW not
12 grown from its size in 1996, and is certainly less than it would have been
13 had Indiana American implemented this project on its own.

14 **Q. What elements make up the total investment in E-CIS?**

15 A. The investment includes Orcom software and implementation expenses,
16 AWW internal labor, overhead and expenses, Professional Fees
17 (Accenture and third party expenses) and allowance for funds used during
18 construction (AFUDC).

19 **Q. When was the investment made?**

20 A. The investment in the E-CIS software and its implementation began in
21 1996 and continued on through 2005, with the majority of the investment

being made between 1997 and 2003. Petitioner's Exhibit AJV-3 outlines the investment made by year.

Q. Did you complete an analysis of these project-related expenses?

A. Yes. Documentation of the associated contracts and fees was provided to me and my team by AWW for analysis.

Q. How much of the costs were paid to Orcom?

A. Approximately $4.4 million was spent on the Orcom software and $13.3 million was spent on Orcom services. The amounts paid to Orcom for software and services each year was as follows:

	1996	1997	1998	1999	2000	2001	2002	2003	2004	Total
Orcom Software (000's)	261	1,044	627	430	0	0	2,000	0	0	4,362
Orcom Services (000's)	9	1,501	3,640	1,532	938	1,675	1,782	2,156	97	13,331

Q. Please elaborate on how the other costs impacted the total investment and what they represent.

A. Professional fees, including fees paid to the system integrator, third party contributors and all related expenses, accounted for $31.2 million of the total spend, or 42%. AWW internal labor and expenses contributed $13.9 million to the total, or 18%. The remainder of the costs consist of $6.1 million in AFUDC and $4.9 million of miscellaneous expenses. These expenditures are shown by year in the following table:

	1996	1997	1998	1999	2000	2001	2002	2003	2004	Total
AWW (000's)	368	1,474	1,474	1,474	2,322	2,921	2,591	1,181	67	13,872
Professional Fees (000's)	-	-	-	-	2,978	13,455	11,350	2,525	878	31,186
Miscellaneous (000's)	172	689	689	689	679	933	611	394	0	4,855
AFUDC (000's)										6,135

Q. How much capital would have been invested for Indiana American to upgrade the EDIS system?

A. Chartwell's CIS Report[4] (Chartwell Inc. publishes comprehensive in-depth research reports on management practices and new technologies in the utility industry), which was based on 2003 data, put the average cost for upgrading an existing CIS at between $22 and $28 per customer. With a customer base of 272,000 (at the time the decision was being made), it would have cost Indiana American between $5.9 million and $7.5 million just to upgrade its existing CIS. However, and as was explained in Cause No. 42520, EDIS was in dire need of replacement, not just an overhaul, because an upgrade would not have included the required functionality to provide the standard services needed today.

Q. Would Indiana American have incurred any capital costs if it continued to use EDIS?

A. Yes, in my opinion, it would have been necessary for Indiana American to upgrade EDIS and thus incur the capital costs associated with an upgrade. Upgrades to software systems are common, and are generally required to enhance functionality, repair programming issues in prior versions,

[4] Dunklin, Philip I. et al. The Chartwell 2004 CIS Report: 5th Edition, January 2004.

1 improve reliability, and keep the software up to date with interfacing
2 systems. Additionally, software companies will not support out of date
3 versions. This creates a burden for internal maintenance capabilities
4 and/or additional risk for the user who chooses not to upgrade.

5 **Q. In your opinion, was it reasonable and prudent for Indiana American**
6 **to acquire E-CIS and incur the cost thereof?**
7 A. Yes. The acquisition of E-CIS was a prudent and required cost of
8 providing an acceptable standard of customer service to the customers of
9 Indiana American. The cost incurred by Indiana American was
10 reasonable and consistent with costs incurred by other utilities
11 implementing similar systems, and the cost was much less than the cost
12 of implementing this technology on its own.

13 **Q. What benefits does the ORCOM E-CIS offer over the EDIS software?**
14 A. The E-CIS is more sophisticated, more consistent and more user-friendly.
15 E-CIS is Windows-based and has a Graphical User Interface (GUI) as
16 opposed to the mainframe "green-screen" approach of EDIS. This
17 immediately improved the ease of use since most computer users are
18 more familiar and more comfortable with the Windows operating platform.
19 In addition, being Windows-based allows E-CIS to be compatible with
20 other packages and programs currently in use. For example, E-CIS has
21 numerous pre-populated form letters pre-installed so that an agent can
22 automatically complete and mail specific form letters to the customer.

1 Another benefit is that E-CIS supports enhanced reporting. With the EDIS
2 software, the IT department had to manually build queries to gather
3 information for reports, and none of the information could be gathered in
4 real time. By way of contrast, E-CIS can automatically generate reports in
5 real time using reports already installed in the system. Finally, EDIS was
6 more operator-intense since it performed batch-type processing, one job
7 after another instead of simultaneously.

8 **Q. How does the E-CIS software benefit Indiana American's customers?**
9 A. E-CIS has many more billing capabilities and allows users to personalize
10 the customer's experience. For example, a customer can request the day
11 of the month he/she wants to be billed. If a customer wants an end-of-the-
12 month billing cycle, the customer gets an end-of-the-month billing cycle.
13 With EDIS, the billing date was pre-selected and could not be changed. A
14 second benefit to the customer is that E-CIS allows more time for billing
15 personnel to review bills and correct mistakes before the bills are mailed
16 out. This helps to ensure that the customer receives an accurate bill the
17 first time. A third example of the benefits E-CIS provides to customers is
18 its ability to generate detailed bills. Bills are now itemized by every
19 component of the total bill amount. Customers can actually see the usage
20 applied against the tiered-rate structure, as well as all the fixed charges
21 individually broken out. EDIS could only display the lump sum bill amount.
22 The E-CIS software makes it easier for the customer to understand his/her
23 bill and will help to reduce the number of bill-related calls that stem from

1 the fact that the customer cannot clearly ascertain how the bill was
2 calculated or where the charges come from. Standardization of E-CIS
3 throughout AWW contributes to more consistent data reporting and
4 understanding of issues which enhances service to customers.

5 **Q. Besides rate base-related costs associated with E-CIS, are there**
6 **other costs for which Indiana American seeks recovery?**
7 A. Yes. There are annual operation and maintenance expenses.

8 **Q. What are the test year operation and maintenance costs related to**
9 **the E-CIS system.**
10 A. The test-year expense for ORCOM maintenance for Indiana was
11 $119,000.

12 **Q. Is this level of operation and maintenance expense reasonable?**
13 A. Yes. According to The Chartwell CIS & Customer Care Systems Report
14 2004, the annual CIS maintenance expense for water companies with a
15 customer base of 250K-499K ranged from $70,000 to $1MM annually.[5]
16 IAWW's CIS maintenance expense is on the low end of this spectrum.
17 The systems report cites a minimum annual maintenance expense of $1
18 million for electric, gas and water utilities with customer bases over 1
19 million.

20

[5] Dunklin, Philip I. et al. The Chartwell CIS and Customer Care Systems Report 2004. March 2004.

1 **CUSTOMER SERVICE CENTER O&M**

2 **Q. Please describe the American CSC that serves Indiana American**
3 **customers.**

4 A. The American CSC has two locations that serve Indiana American
5 customers. The primary location serving Indiana is in Alton, Illinois. This
6 facility operates 24 hours a day, 7 days a week and offers an enhanced
7 Interactive Voice Response system (IVR) to handle customer inquiries.
8 The Pensacola location on average handles a significant percentage of
9 incoming calls from AWW customers. It serves as a reliable mirror image
10 for Alton in the case of storms and power outages. Since its inception in
11 2005, the Alton facility has experienced three power outages which
12 resulted in routing all calls to Pensacola so that the customer calls would
13 not be interrupted. Indeed, on November 30, 2006, the recent winter
14 storm that passed through the Midwest caused the center in Alton to close.
15 The transition was seamless, as the incoming calls were routed to
16 Pensacola.

17 **Q. What did the Commission conclude about Indiana American's**
18 **decision to move its customer service center from Richmond,**
19 **Indiana to Alton in 2004?**

20 A. The Commission ruled that it was not necessary to consolidate to the
21 Alton call center. The Commission therefore did not allow recovery of
22 associated expenses in excess of the amount reflected in Indiana

1 American's costs for the Richmond CSC. The Commission claimed that it
2 did not support the move to Alton because the Richmond center provided
3 "world class service." As a result, the Company was authorized the
4 recovery of the costs associated with the former center in Richmond.

5 **Q. What challenges are posed for the Commission as a result of this**
6 **determination for future cases, including the pending rate case?**
7 A. So long as the Commission continues to be of the view that the decision to
8 participate in the American CSC was imprudent, the Commission must
9 determine the appropriate level of customer service costs that would have
10 been incurred to operate the former Richmond center. I believe the
11 decision to participate in the American CSC was prudent; nevertheless, I
12 have calculated the pro forma level of expenses that would likely have
13 been incurred to continued operating the Richmond center.

14 **Q. Have you visited the Alton and Pensacola locations?**
15 A. Yes, I visited the Alton location on a number of occasions in 2003, and
16 both locations in October of 2006.

17 **Q. How does the American CSC compare to other call centers in the**
18 **Utilities industry?**
19 A. Today's customers have expectations that are supported by industry
20 standards for customer service. The Alton and Pensacola locations are
21 state-of-the-art facilities that are capable of meeting these standards. The

1 facilities incorporate self-serve capabilities, intelligent call routing, service
2 order tracking and automatic account retrieval as part of their functionality.

3 **Q. Why did Indiana American need to invest in a new CSC?**

4 A. Technically, the old Richmond facility provided the minimum services
5 needed to operate the utility. It was able to calculate and generate bills, it
6 could handle customer inquiries, and could provide customers information
7 within the parameters of its design. The Richmond facility was able to
8 receive incoming calls up to its capacity of 30 trunk lines. Its capabilities
9 were rapidly falling behind the industry standard in terms of customer
10 service capabilities. It had limited operational hours, did not offer service
11 agents the ability to track customer problems through the resolution
12 process, provided only limited self-help capabilities, and no skills based
13 call routing to help customers reach the agent who could help resolve their
14 problem on the first call. These are all capabilities that provide the
15 customer with the better level of service required today, as well as a more
16 cost effective level of service.

17 **Q. Can you please describe the expectations of today's customer?**

18 A. Today's customers have expectations that are driven by industry
19 standards for customer service. These standards relate not only to
20 dealings with water utilities, but to all dealings with customer service
21 centers. Customers require flexibility in how and when they can access a
22 customer service representative ("Agent"). When customers place calls to

1 a service center, they expect their calls to be answered quickly and their
2 issues to be resolved efficiently. If a customer's telecommunications
3 provider, for example, offers enhanced customer service, then the
4 customer will inherently demand that its water utility, as well as all other
5 utilities, credit card providers, cable providers, department stores, etc.,
6 also provide that same level of service. The American CSC uses
7 technology that enables Indiana American to satisfy these demands.

8 Additionally, one of the most important developments in customer service
9 has been the growing acceptance of self-help technologies, and the
10 customers' growing acceptance of these technologies. As of 2004, 63%
11 of utilities were using IVR systems, with an average take rate of 23.7%[6].
12 Customers now expect to be able to pay bills over the phone using IVR
13 technologies, change address and other billing information, or request
14 service calls. This trend will help companies with these capabilities drive
15 service costs down as more and more customers use these channels.

16 **Q. In your opinion, did the "as-was" Richmond facility operations offer**
17 **an acceptable level of service to Indiana American's customers**
18 **today and in the future?**

19 A. No. The Richmond facility may have at one time offered an acceptable
20 level of service, but its capabilities were rapidly growing outdated. Indiana
21 American could have chosen to forego upgrading the quality of its

[6] Dunklin, Philip I. et al. The Chartwell Report on IVR Applications and Speech Technologies 2005. August 2005.

customer service operations, but it would have been doing so at the expense of the Indiana customers' service and satisfaction.

Q. What are some examples of the customer service enhancements that the CSC provides to Indiana's customers?

A. First, the CSC operates 24 hours a day, 7 days a week. This allows customers with emergencies or even bill inquiries to reach an Agent at their convenience. Second, the CSC also has a much more enhanced Interactive Voice Response system (IVR). The CSC IVR offers many advantages over the IVR at the Richmond center, such as allowing customers to complete more self-service transactions, supporting Automatic Call Distribution (ACD) and Computer Telephony Integration (CTI), and enabling skill-based routing (also referred to as "Expert Agent Selection" and "Vectoring").

Furthermore, the CSC's service quality reporting capabilities are more robust than those in the Richmond facility. The CSC conducts more customer surveys and can report daily on many more metrics, allowing it to have more customer-specific information and to more effectively respond to customer needs and expectations. Examples of these metrics are depicted in Petitioner's Exhibits AJV-4 and 5.

The CSC also offers an online information database, H2O Online, which assists Agents in quickly accessing state-specific information. A screen shot of H2O Online is attached as Petitioner's Exhibit AJV-6. As this

1 screen shot demonstrates, data relating to water resources and weather
2 are readily available on H2O Online to address customer inquiries.
3 Coupled with the CSC's internal Instant Data Access screens, customer
4 inquires related to premise-specific data, including fees, outages, and
5 regulations are accessible to Agents within seconds, as shown in
6 Petitioner's Exhibit AJV-7.

7 **Q. Please explain some of the quality of service metrics that the CSC**
8 **tracks and monitors.**
9 The CSC is held accountable for Average Speed of Answer,
10 Abandonment Rate, First Call Resolution, Handle Time, Complaint Rate
11 and Customer Inquiry Response Time, to name just a few. Richmond's
12 Director of Customer Service actively tracked only two metrics, Average
13 Speed of Answer and Talk Time. Customer complaints were logged in the
14 system, but the Richmond center was not held to a particular target, so
15 there was no accountability beyond that of a particular agent whose
16 performance warranted review.

17 **Q. Why is comparability of service important?**
18 A. Comparability of service is critical for setting goals and operating targets.
19 There are a number of customer service performance metrics, including
20 Service Level, Call Handle Time and Abandonment Rate, by which call
21 centers can gauge their performance relative to industry standards.
22 Without considering these and calculating them appropriately, it will be

very difficult for any call center to have a basis from which it can improve its service.

Q. What other aspects of the CSC enable customers to experience the appropriate and expected level of service?

A. The CSC utilizes skills-based routing, allowing calls to be routed to Agents who are knowledgeable on specific customer needs, which positively impacts first call resolution and the customer experience. Another benefit of the CSC is its Critical Center, which is designated solely for emergency calls needing real-time resolution with a field representative. Agents in the Critical Center have the ability to three-way call field representatives with the emergency caller on the line in order to ensure speedy resolution and communication with the customer. The CSC also supports automatic call monitoring. A screen shot of this monitoring ability is presented as Petitioner's Exhibit AJV-5. This greatly enhances the quality assurance process by allowing managers to record telephone interactions and review them at any time. Managers can also choose to review telephone interactions for a particular agent or a particular day. A screen shot of the report on Agent performance is attached as Petitioner's Exhibit AJV-4. A strong quality assurance process is important to helping ensure that agents are appropriately trained and that customers are receiving the appropriate level of customer service. Further, the CSC employs workforce management software, Blue Pumpkin, which automates the forecasting and scheduling processes and provides for more accurate

1 predictions of staffing needs. A screen image of Blue Pumpkin is attached
2 as Petitioner's Exhibit AJV-8. This scheduling tool is a significant
3 enhancement to customer service.

4 **Q. Are there any other benefits to the CSC?**

5 A. Yes. One of the more important aspects of the CSC is its ability to handle
6 call volume smoothing. The CSC is more effective at quickly ramping up
7 its operations and distributing high call volumes to areas of lesser activity.
8 Also, the fact that the American CSC is a national call center provides the
9 added benefit of operating under multiple time zones. Periods of peak call
10 volume in one time zone are offset by periods of off-peak call volume in
11 another time zone. In addition to reducing strains on staffing requirements,
12 all these factors enable the CSC to handle more calls at any given time,
13 subsequently blocking fewer calls (i.e. give a busy signal) and putting
14 fewer callers on hold for extended periods of time.

15 **Q. What are some other areas in which the Richmond facility needed**
16 **improvements?**

17 A. The Richmond facility was incapable of performing many of the functions
18 that are required to meet today's customer service standards. These
19 functions include: skill-based routing, self-service capable IVR, expanded
20 hours of operation, and emergency capacity capabilities.

21 In the Richmond environment, the IVR self-service options were limited to
22 only checking account information, such as account balance and the date

1 of last payment. Today's standards requires IVR systems to provide
2 phone payments, billing option changes, service call scheduling, and
3 outbound notification. These capabilities were available through
4 participation in the American CSC.

5 The Richmond facility did not operate 24 hours a day and did not operate
6 on weekends and holidays. This limited Indiana customers' access to
7 agents and created unnecessary call volume peak periods every Monday
8 and on every day following a holiday. The facility was forced to ramp up
9 operations on these days in anticipation of high call volumes. Richmond
10 had no ability to perform call volume smoothing in real time. If an
11 emergency happened, or if the center experienced unexpectedly high call
12 volumes in the middle of the day, then many calls simply never got
13 through. The Richmond facility was unable to quickly ramp up operations
14 or to transfer calls to areas with less call volume. Prior to the conversion
15 to the American CSC, Indiana American was fortunate enough to be able
16 to leverage its affiliation with AWW so that it could transfer emergency
17 calls received after normal business hours or on the weekends to the
18 American CSC. However, prior to Indiana American's conversion to the
19 American CSC, these after-hours calls were not always resolved
20 accordingly or handled to the customer's satisfaction. In addition,
21 customers with non-emergency calls, such as a high bill inquiry, had to
22 call back during normal hours of operation, because the American CSC
23 agents had no access to Indiana's customer information. This was an

1 inconvenience for customers who only find time in the evening or on the
2 weekend to handle these types of personal matters.

3 With the new systems, and participation in the American CSC, Indiana
4 American customers benefit from the ability of the Alton location to route
5 calls to Pensacola to handle calls in the event of an outage at Alton or in
6 the case of call volume spikes. On July 19th of 2006, metropolitan St.
7 Louis experienced a storm which resulted in an eight hour loss of power in
8 Alton. During this time, the Pensacola facility was able to receive calls in
9 place of Alton, allowing customer service to go on uninterrupted. As I
10 noted previously, a more recent example was the winter storm of
11 November 30, 2006. Unlike the call rerouting capabilities of the Richmond
12 facility, the new systems allow the Florida Agents to provide a full
13 complement of customer service when answering Indiana American calls.

14 **Q. You indicated previously that you have performed the calculation of**
15 **the pro forma level of expenses that would have been incurred to**
16 **operate the Richmond center today. If the Commission continues to**
17 **be of the view that the decision to participate in the American CSC**
18 **was imprudent, what level of cost should be recovered for customer**
19 **service associated with the former Richmond center?**

20 A. My evaluation shows that Indiana American's expenses are actually
21 $200,000 less annually than the costs of the Richmond center would have

1 been once those Richmond center costs are adjusted for inflation and the
2 impact of increased calls.

3 **Q. What evaluation did you conduct?**

4 A. I calculated the impact of the increased call volumes on Richmond's O&M
5 by normalizing costs per call and projecting the costs based on the actual
6 call volumes. Then, based on the call center O&M expenses for
7 Richmond in 1999 and 2003, I projected expenses through 2006 using a
8 2.5% rate of inflation for non-labor expenses and 4% rate for labor
9 expenses. This evaluation is presented as Petitioner's Exhibit AJV-9.

10 **Q. How much has the Indiana American's customer base grown?**

11 A. Indiana American's customer base has grown from 256,000 accounts in
12 1999 to 286,000 accounts in 2006, representing an increase of almost
13 12% over the period or approximately 1.6% per year. This rate is
14 consistent with growth rates for utilities in the United States. It is expected
15 that growth rates in the 1% - 2% range will continue.

16 **Q. You indicated that the number of calls has increased. Please explain.**

17 A. From 2003 (the last full year of operations in Richmond) to 2005 (the first
18 full year of Indiana's participation with the CSC) call volumes from Indiana
19 customers increased by 16%.

20 **Q. To what do you attribute this increase?**

1 A. Over the past few years, I have observed the utility industry trending
2 towards an increased number of calls per customer. For companies
3 comparable to AWW, calls per customer have increased from 2.4 annually
4 in 2002 to 2.9 annually in 2006. AWW's calls per customer numbers,
5 outlined in Petitioner's Exhibit AJV-10 are 2.3 calls per year, well below
6 this average. This trend and the increase in customer numbers since
7 2003 explain the increased number of calls after the transition to the
8 American CSC. Both effects were also being seen gradually in Richmond
9 before the transition. Increased calls can also be attributed to the
10 expanded capacity and hours of operation afforded to Indiana American's
11 customers by the American CSC.

12 **Q. What does your evaluation show the total O&M costs would have**
13 **been for Richmond with the increased number of customers and call**
14 **volume?**

15 A. Given the increase in call volume and applying reasonable inflationary
16 factors, the annual O&M cost for Richmond would have been $3.7 million.
17 Petitioner's Exhibit AJV-11 demonstrates Richmond's O&M costs. This
18 increase is the result of two factors. First is an increase in call volumes for
19 the period. Total calls for the period averaged 53,600 per month,
20 representing an increase of 16% over Richmond's 2003 call volume.
21 Secondarily are the normal inflationary pressures on costs which
22 contributes to the overall cost increase.

1 **Q. What was the test year share of the American CSC O&M for Indiana**
2 **American?**
3 A. Indiana American's portion of O&M for the test year, July 2005 through
4 June 2006, was $3.5 million, or 5.7% less than what it would have been at
5 Richmond. Petitioner's Exhibit AJV-12 depicts these costs.

6 **Q. What are the resultant Richmond costs compared to the American**
7 **CSC?**
8 A. Richmond's O&M values, projected out through 2006, were divided by the
9 call volume for 1999 and 2003, respectively, to come up with a cost-per-
10 call based on previous operating expenses. As can be seen in Petitioner's
11 Exhibit AJV-13, the cost per call for Richmond based on 1999 O&M is
12 $6.70, and based on 2003 O&M, $5.48. The call center O&M incurred by
13 Indiana American for the '05-06 American CSC test year reflects a cost of
14 $5.10 per call. Petitioner's Exhibit AJV-13. The $5.10 cost per call is
15 lower than would have otherwise been the case, and it is more consistent
16 with the costs per call normally found within the industry.[7] In fact, Indiana
17 American's cost per call today as a participant in the American CSC is
18 lower than Indiana American's actual cost per call of the Richmond center
19 in 2003.

20 **Q. In your opinion, should costs associated with the American CSC be**
21 **recoverable?**

[7] Dunklin, Philip I. et. al. The Chartwell Customer Care Center Report 2005. December 2004.

1 A. Yes. The American CSC test year expenses should be recoverable on
2 the basis that they are $200,000 less annually than Richmond would have
3 been if corrected for inflation and the impact of increased calls, as shown
4 in Petitioner's Exhibit AJV-9. The difference would have been greater if
5 there had been upgrades to the Richmond center to provide some of the
6 enhanced services available at the American CSC. The American CSC
7 offers a multitude of services designed to enhance the customer
8 experience, and does so at a lesser ongoing expense than what Indiana
9 American would be paying for its legacy call center.

10 **Q. Why is customer service important in a regulated utility**
11 **environment?**

12 A. The desired outcome of a good regulatory regime is where the customer
13 receives the quality of service it would expect from a competitive
14 environment without paying prices in excess of a reasonable return on
15 capital. While, in Indiana, there are opportunities for alternate water
16 service providers, Indiana American operates as if it were operating in a
17 regulated utility environment. Utilities must have the appropriate level of
18 technology to support customer service as they would in a purely
19 competitive environment. Utilities should provide the same convenience
20 and efficiency non-regulated industries provide, while earning a
21 reasonable rate of return that reflects the costs and risks associated with
22 the service provided.

1 The investment in the new customer information center reflects the need
2 to provide the customers with a level of service and efficiency that is
3 consistent with customer expectations. This is a practice that is common
4 among utilities nationwide. For example, in compiling the data for its CIS
5 Report, Chartwell questioned utility officials as to how they can justify the
6 cost of implementing or upgrading their CIS. Eddy Hernandez of the
7 Brownsville (Texas) Public Utility Board raised a good point about utilities
8 taking advantage of their captive audience in an environment without
9 customer choice:

> 10 I really don't even look at it that way (as strictly a
> 11 financial return). It is an imperative to keep up with
> 12 the technology of the day. Yes, we can put up the
> 13 fences and say we're a monopoly, but our whole
> 14 strategy is to act and be as much like a private utility
> 15 as we can by providing the same services and the
> 16 same quality of services.

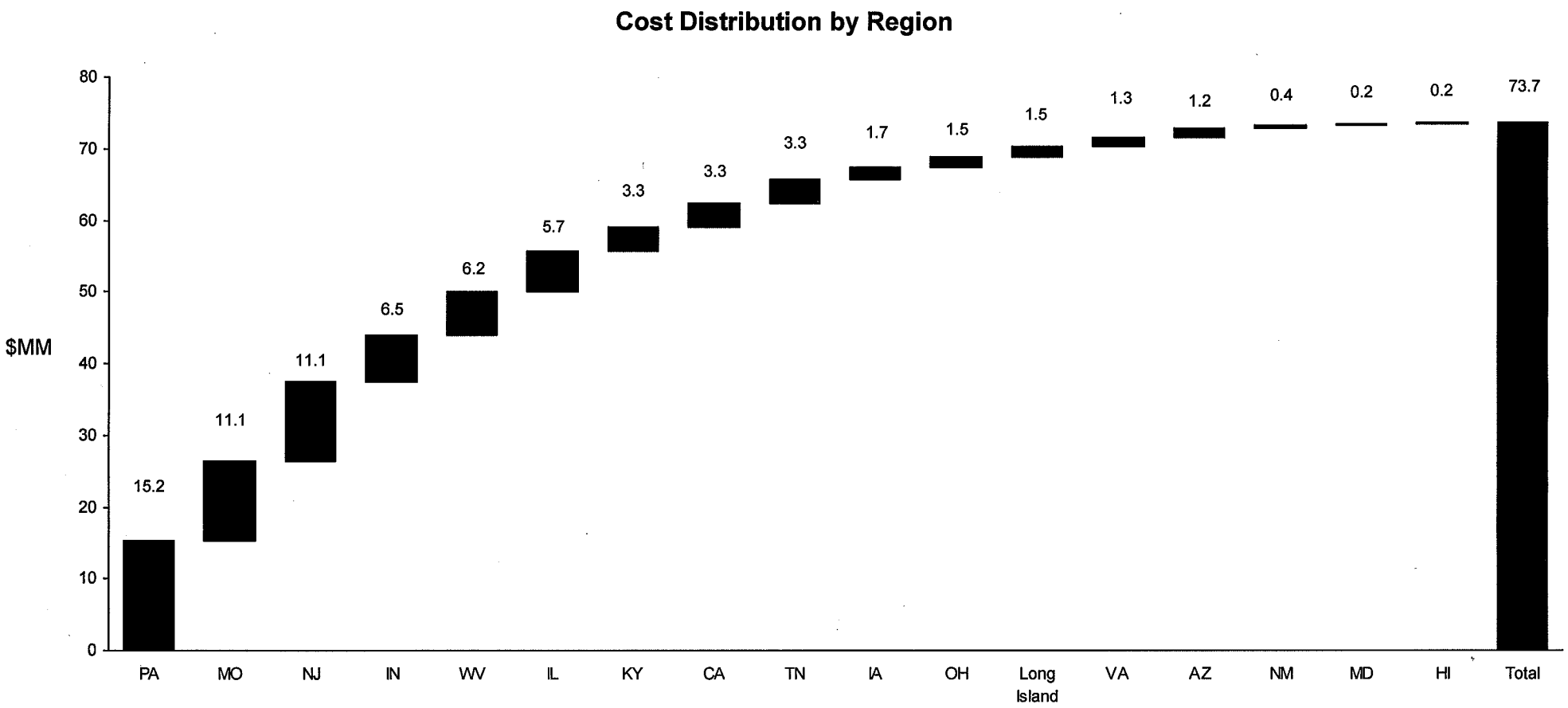
17 I would expect that Indiana is of a similar view. Indiana American could
18 have continued its operations using Richmond. But the point at which
19 Richmond no longer provided acceptable service would have come and a
20 much larger investment at a future date for the same services and quality
21 of services that the American CSC gives, cost effectively, right now.

22 **Q. Does this conclude your prepared testimony?**

23 A. Yes, it does.

24 INDS01 PJS 903255v4

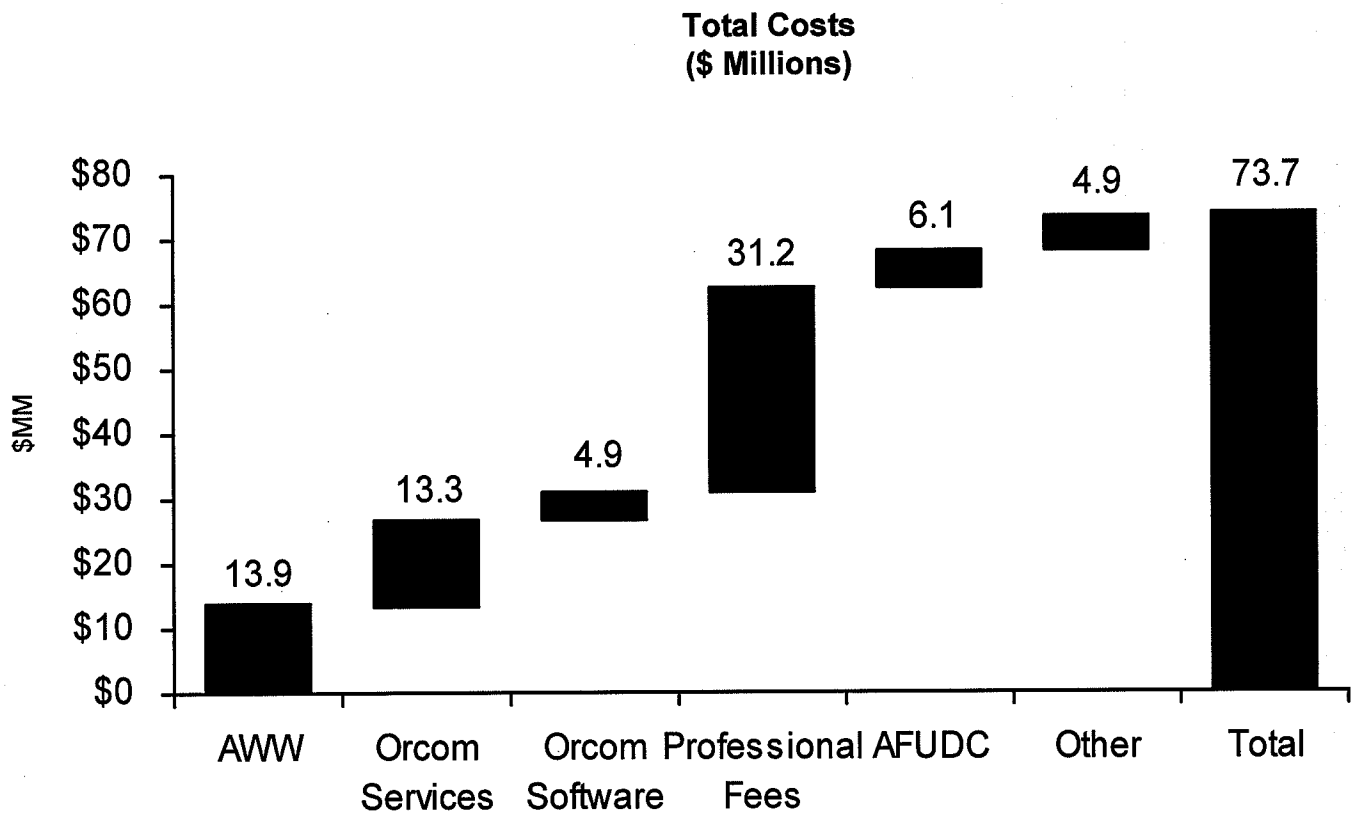
Exhibit AJV – 1
ORCOM E-CIS Upgrade Cost Distribution



Source: American Water "IDT Orcom Charges 2004"

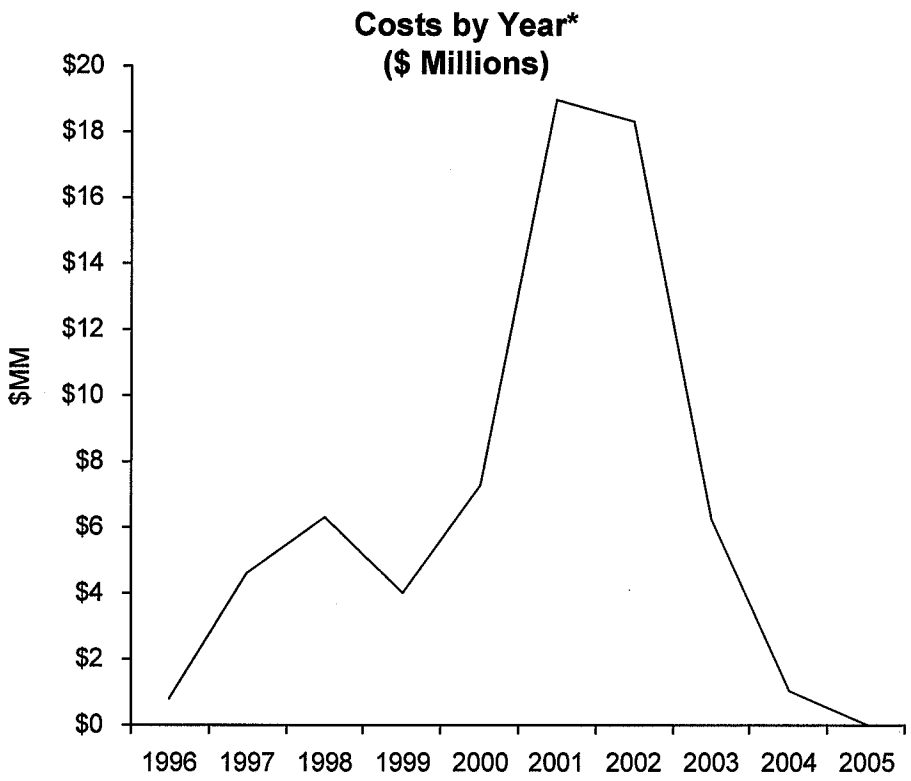
Booz | Allen | Hamilton

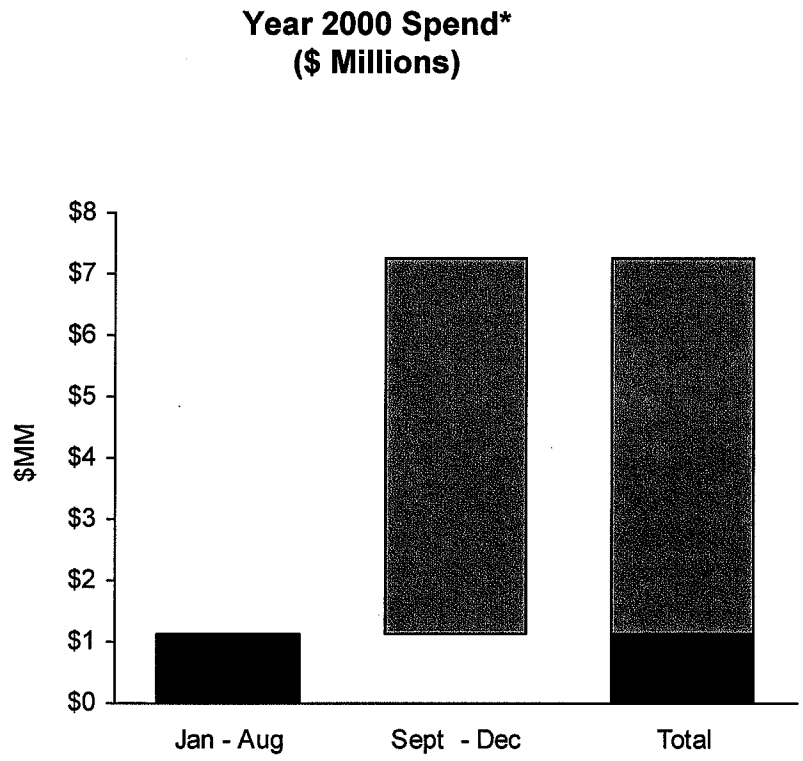
Exhibit AJV - 2
ORCOM E-CIS Upgrade Costs



Source: American Water "ECIS Implementation Details"

Exhibit AJV - 3
ORCOM E-CIS Upgrade Costs Over Time





Source: American Water "ECIS Implementation Details"
**Excludes AFUDC Expense*

Exhibit AJV – 4
Screen Shot – CMS Report of Real Time Call Monitoring/Queue Management

Multi Split/Skill Report with Totals

Report Edit Format Tools Options Help

Split/Skill	Calls Waiting	Oldest Call Waiting	Avg Speed Ans	ACD Calls	Avg ACD Time	Aban Calls	Avg Aban Time	Agent Avai
Totals	50	:02:35	:04:00	455	:04:31	45	:02:28	
SE OTHER New	5	2:33	5:56	29	6:05	8	3:25	
PA OTHER New	5	2:32	5:46	45	4:18	7	2:12	
NE BILLING New	3	2:16	5:17	29	3:32	5	3:42	
COLLECTIONS	1	:08	1:42	9	3:27	0		
MO OTHER New	1	:00	:34	30	4:13	1	:01	
MO OTHER	0	:00		0		0		
MO BILLING	0	:00		0		0		
SE OTHER	0	:00		0		0		
SE BILLING	0	:00		0		0		
WEST OTHER	0	:00		0		0		
WEST BILLING	0	:00		0		0		
WEST OTHER New	0	:00	:46	33	4:05	2	:38	
WEST BILLING New	0	:00	:41	8	3:17	0		
COLLECTIONS PA	0	:00	2:17	15	5:56	2	2:50	
EMERGENCY New	0	:00	:01	24	4:57	0		
MO BILLING New	0	:00	:41	16	5:16	0		
EMERGENCY	0	:00		0		0		
IN EMERGENCY	0	:00		0		0		
IN OTHER	0	:00		0		0		
IN BILLING	0	:00		0		0		
MW BILLING	0	:00		0		0		
MW OTHER	0	:00		0		0		

Agent Group Report - PNS Orcom

Report Edit Format Tools Options Help

Agent Group: PNS Orcom

Agent Name	Login ID	Extn	AUX Reason	State	Split/Skill	Time	VDN Name
PNS Trng 15	8316	3722		OTHER		3:57	
PNS Trng 1	8301	3741		OTHER		1:18	
Moreno, Amy	8289	3641	Break	AUX		15:04	
Kendall, Patricia	8435	3698	Break	AUX		14:52	
Sanders, Carolyn	8180	3792	Break	AUX		3:42	
Muhammad, Murad Ibn	8257	3794	Break	AUX		1:57	
Smith, Amanda	8259	3793	Break	AUX		1:37	
Andrews, Dawn	8222	3750	Default	AUX		19:16	
Tillery, Lisa	8249	3708	Default	AUXOUT	62	4:59	
Oehmsen, Cathy	8183	3712	Default	AUX		3:42	
PNS Trng 2	8302	3738	Default	AUX		1:26	
Johnson, Brandi	8285	3808	Default	AUX		:19	
Snowden, Allison	8266	3803	Lunch	AUX		57:02	
Blair, Carolyn	8443	3804	Lunch	AUX		51:24	
Stokes, Kenneth	8439	3823	Lunch	AUX		48:48	
Glover, Juliana	8431	3819	Lunch	AUX		44:35	
Dewrell, Kim	8425	3815	Lunch	AUX		44:09	
Davis, Rollan	8424	3818	Lunch	AUX		43:08	
Herrington, Martha	8491	3846	Lunch	AUX		27:20	
Reese, Trammell	8476	3812	Lunch	AUX		16:41	
Billera, Maggie	8155	3650	Team Sup/	AUX		62:50	
Bowling, Courtney	8156	3636	Team Sup/	AUX		34:34	
Ciano, Julianna	8202	3653	Team Sup/	AUX		6:12	
East, Jennifer	8274	3607	Technical I	AUX		12:15	
Jackson, Subrina	8470	3847		ACW	70	11:55	New AZ Other/Spanish
Stewart, Mary	8241	3791		ACW	67	6:42	New IL Other/Spanish
PNS Trng 16	8316	3766		ACW	59	4:05	PA Emergency
Ellington, Weslynn	8413	3647		ACW	63	3:46	New LI Billing
Peters, Lauren	8520	3629		ACW	62	3:07	New WV Billing
Nevins, Yolanda	8213	3669		ACW	56	3:06	PA Other
Wilson, Titana	8525	3610		ACW	61	2:51	New WV Other/Spanish
Thompkins, Tina	8482	3681		ACW	64	2:04	New LI Other/Spanish
Mathias, Allen	8517	3618		ACW	57	1:21	MO Billing
Stallworth, Oscar	8459	3820		ACW	62	1:12	New WV Billing
Smith, Laura	8253	3752		ACW	59	1:11	New AZ Emerg
Savage, Monique	8481	3679		ACW	63	1:06	New NJ Billing
Robbins, Betty	8239	3702		ACW	61	:55	New SE Other/Span
Baldonado, Steve	8418	3709		ACW	56	:54	PA Other
Perkins, Althea	8174	3789		ACW	67	:13	New IL Other/Spanish
Clark, Clara	8192	3790		ACW	66	:12	New IN Billing
Anderson, Kimberly	8276	3711		ACW	55	:00	PA Billing
Coby, Regina	8511	3635		ACDIN	58	17:09	MO Other
Rasler, Christina	8521	3628		ACDIN	62	15:23	New WV Billing
Colon, Susan	8282	3826		ACDIN	55	13:39	PA Billing
Feagin, Natrelle	8163	3756		ACDIN	56	11:31	PA Other

Source: American Water

Exhibit AJV – 5
Screen Shot – CMS Report of Agent Performance by Date

CSA by Date - Young, Kali

Report Edit Format Tools Options Help

CSA by Date Rerpot

Date: 7/1/2006-7/31/2006
Agent: Young, Kali

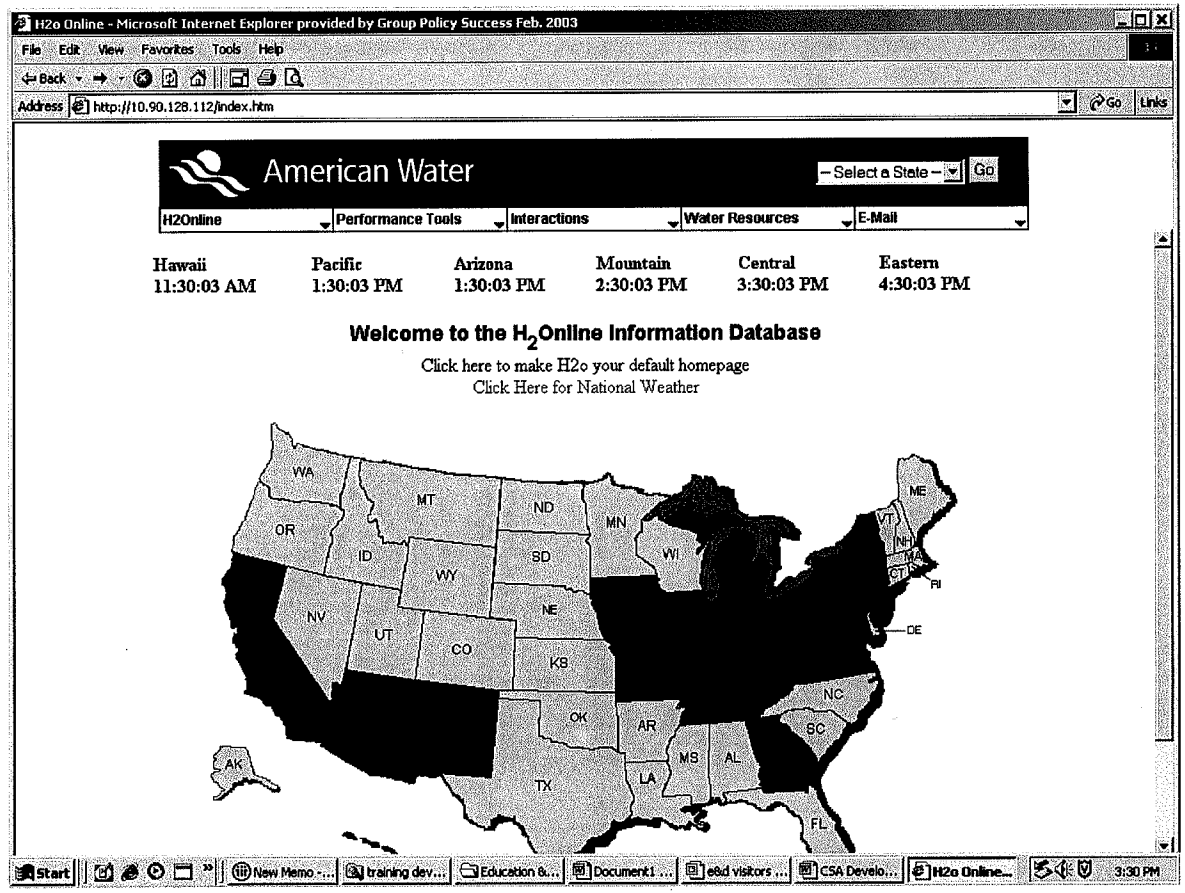
Printed: 11/6/200 3:29 PM
ACD: ALTON_IL_ACD1

	ACD Calls	Talk Time	Hold Time	ACW Time	AUX Time	Readi-ness Time	Staff Time	CSA Avail Time	Avg Talk Time	Avg Hold Time	Avg ACW Time	Avg Handle Time	% CSA Avail
Totals:	1808	104:37:29	7:11:43	37:20:01	50:54:53	23:22:34	228:24:04	172:31:47	3:25	:14	1:14	4:54	74.89
7/1/2006	52	2:22:58	:11:35	:33:41	1:40:33	4:09:18	8:58:28	7:17:32	2:45	:13	:39	3:37	81.26
7/2/2006	22	1:27:59	:07:03	:03:42	1:31:01	3:48:06	6:58:55	5:26:50	3:41	:19	:10	4:10	76.38
7/3/2006	77	4:04:30	:11:33	1:36:31	1:45:50	1:02:12	8:59:36	6:54:46	3:04	:09	1:15	4:28	75.24
7/4/2006	28	1:22:19	:08:13	:13:29	1:42:53	5:35:07	9:01:20	7:19:08	2:40	:18	:29	3:27	79.71
7/5/2006	89	4:15:00	:11:47	2:06:43	2:12:05	:00:03	9:04:12	6:33:33	2:52	:08	1:25	4:25	72.32
7/6/2006	87	5:00:24	:26:35	1:34:45	1:59:13	:01:31	9:00:38	7:03:15	3:27	:18	1:05	4:51	78.29
7/7/2006	90	5:01:51	:12:46	1:26:00	2:07:55	:01:30	8:57:19	6:42:07	3:21	:09	:57	4:27	74.84
7/10/2006	68	4:47:45	:24:16	1:34:06	1:49:18	:00:03	9:01:27	6:46:10	4:14	:21	1:23	5:58	75.01
7/11/2006	103	6:47:41	:30:48	1:03:52	2:29:48	2:05:45	13:06:39	10:28:06	3:37	:18	:37	4:32	75.35
7/12/2006	110	6:38:31	:19:21	1:46:06	2:16:32	1:44:53	12:58:16	10:28:51	3:37	:11	:58	4:45	80.67
7/13/2006	92	5:01:32	:24:06	1:51:36	2:26:40	1:06:13	10:57:37	8:23:27	3:17	:16	1:13	4:45	76.56
7/14/2006	97	5:18:09	:23:40	2:08:02	2:04:36	:23:56	10:42:51	8:13:47	3:17	:15	1:19	4:51	76.81
7/15/2006	63	3:08:23	:14:58	1:05:16	1:47:23	2:33:37	9:00:20	7:02:14	2:59	:14	1:02	4:16	78.14
7/17/2006	77	4:49:55	:17:21	1:56:30	1:47:17	:00:00	9:00:58	7:03:46	3:46	:14	1:31	5:30	78.34
7/18/2006	53	3:21:14	:14:35	1:44:48	3:19:41	:03:29	8:58:31	5:24:06	3:48	:17	1:59	6:03	60.18
7/19/2006	64	4:14:24	:11:01	1:33:10	2:14:10	:17:11	8:50:40	6:15:46	3:54	:10	1:27	5:31	69.85
7/20/2006	85	4:46:45	:26:49	1:45:10	1:45:57	:02:38	8:52:26	7:01:22	3:22	:19	1:14	4:56	79.14
7/24/2006	82	5:09:48	:10:35	1:38:36	1:52:01	:00:00	8:55:00	6:58:59	3:47	:08	1:12	5:07	78.31
7/25/2006	84	5:13:23	:25:24	1:50:56	3:51:40	:08:53	11:58:11	7:38:36	3:36	:18	1:19	5:14	62.40
7/26/2006	114	5:52:23	:28:18	2:40:21	2:11:47	:12:48	11:58:58	9:13:50	3:05	:15	1:24	4:45	77.03
7/27/2006	70	3:52:16	:26:56	2:18:38	2:19:12	:00:00	9:00:03	6:37:50	3:19	:23	1:59	5:41	73.67
7/28/2006	97	5:18:55	:11:56	2:16:21	2:48:20	:01:18	10:58:15	7:48:30	3:15	:07	1:24	4:46	70.55
7/29/2006	39	1:48:21	:12:45	1:08:42	:36:18	:04:03	4:02:02	3:13:51	2:47	:20	1:46	4:52	80.09
7/31/2006	65	4:53:03	:19:22	1:23:00	2:14:43	:00:00	9:01:22	6:35:25	4:22	:18	1:17	5:56	71.29

ALTON_IL_ACI

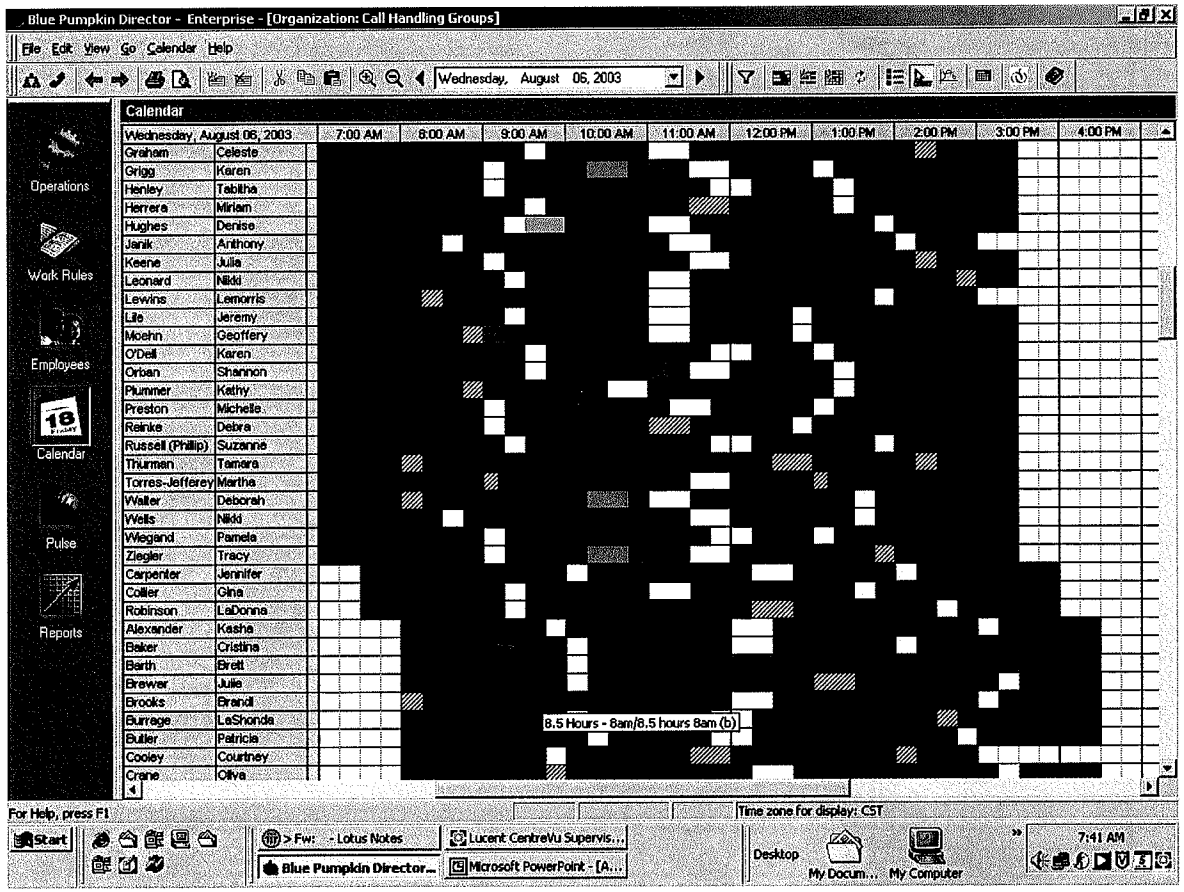
Source: American Water

Exhibit AJV – 6
Screen Shot – H2O Online State Specific Information



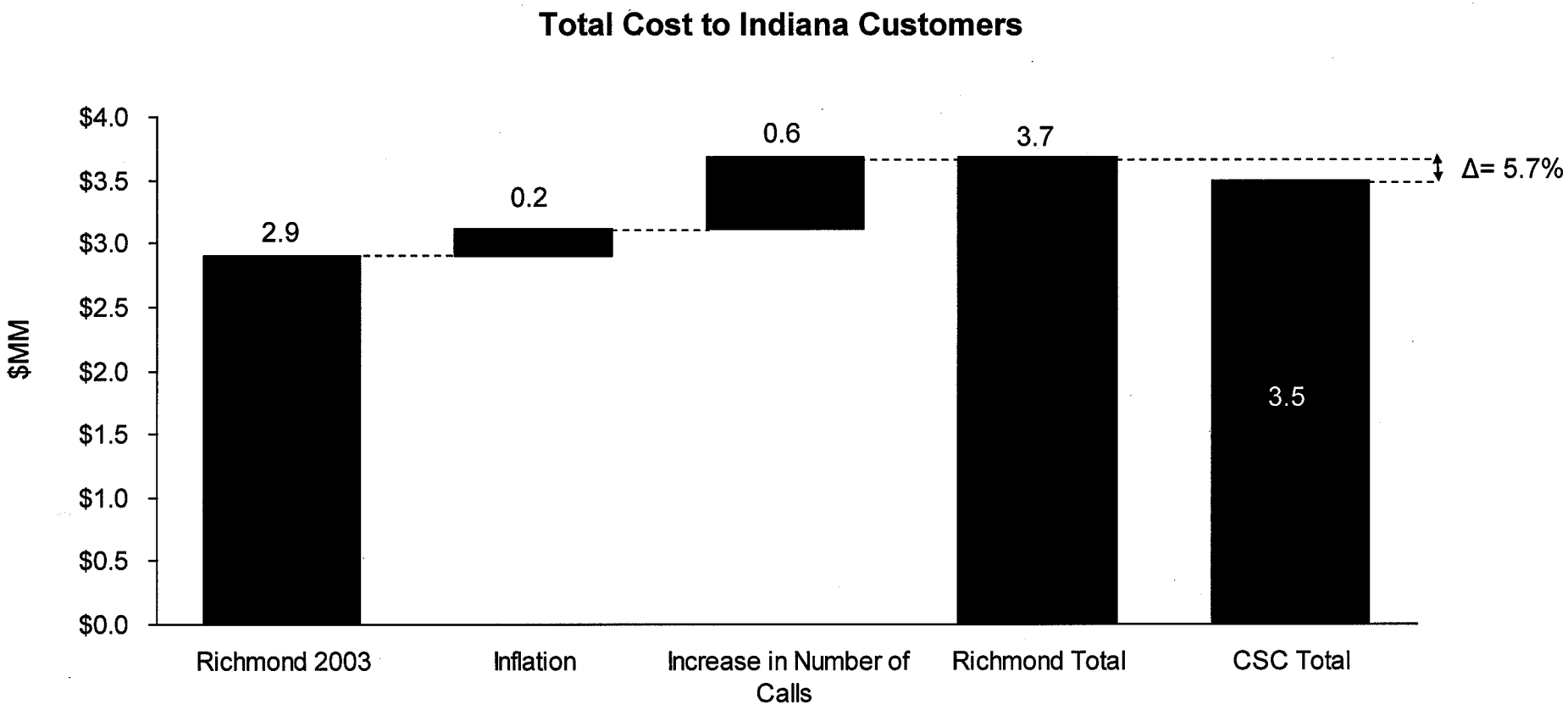
Source: American Water

Exhibit AJV – 8
Screen Shot - Blue Pumpkin Scheduling Tool



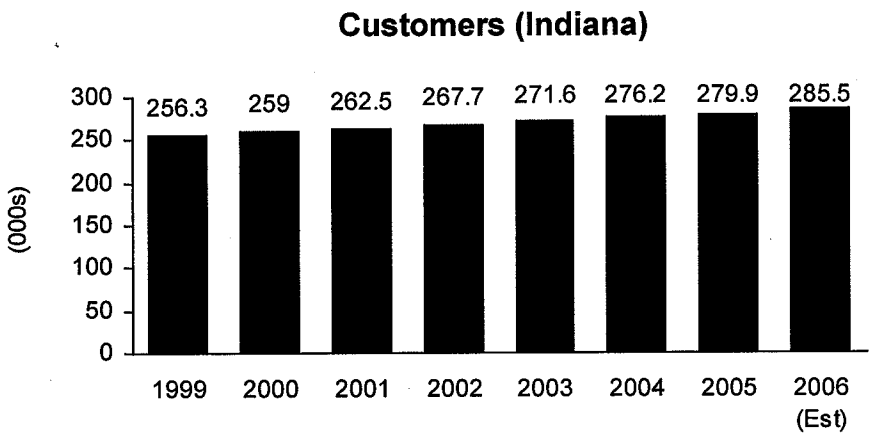
Source: American Water

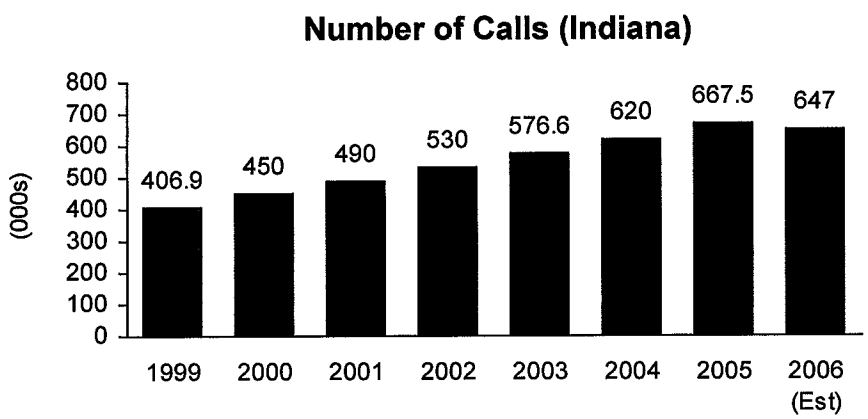
Exhibit AJV – 9
Richmond to CSC Cost Comparison

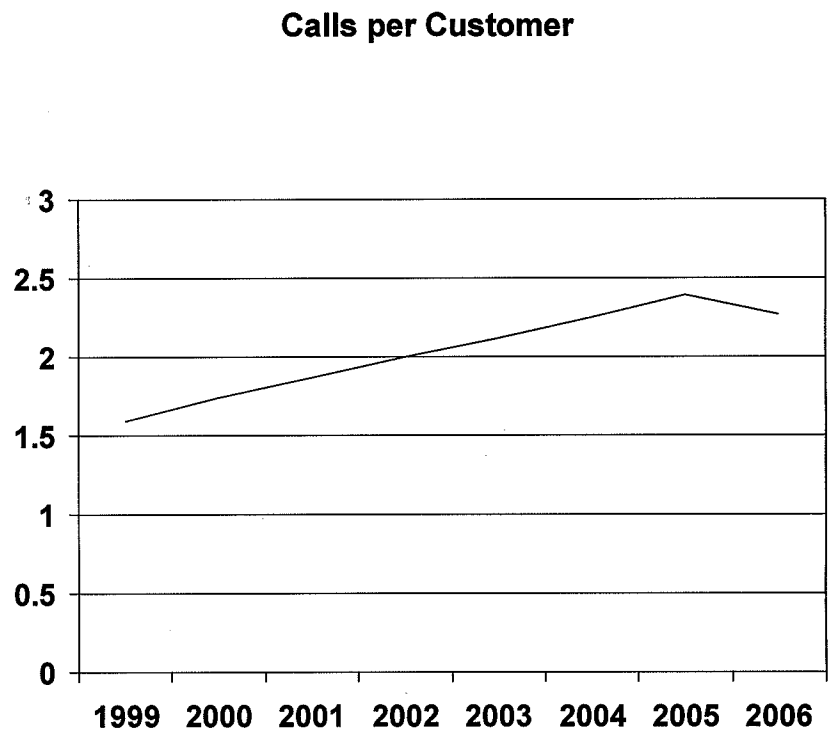


Source: American Water; Booz Allen Hamilton analysis
Projections based on test-year call volume of 679,612.

Exhibit AJV – 10
Change in Customer Call Volumes

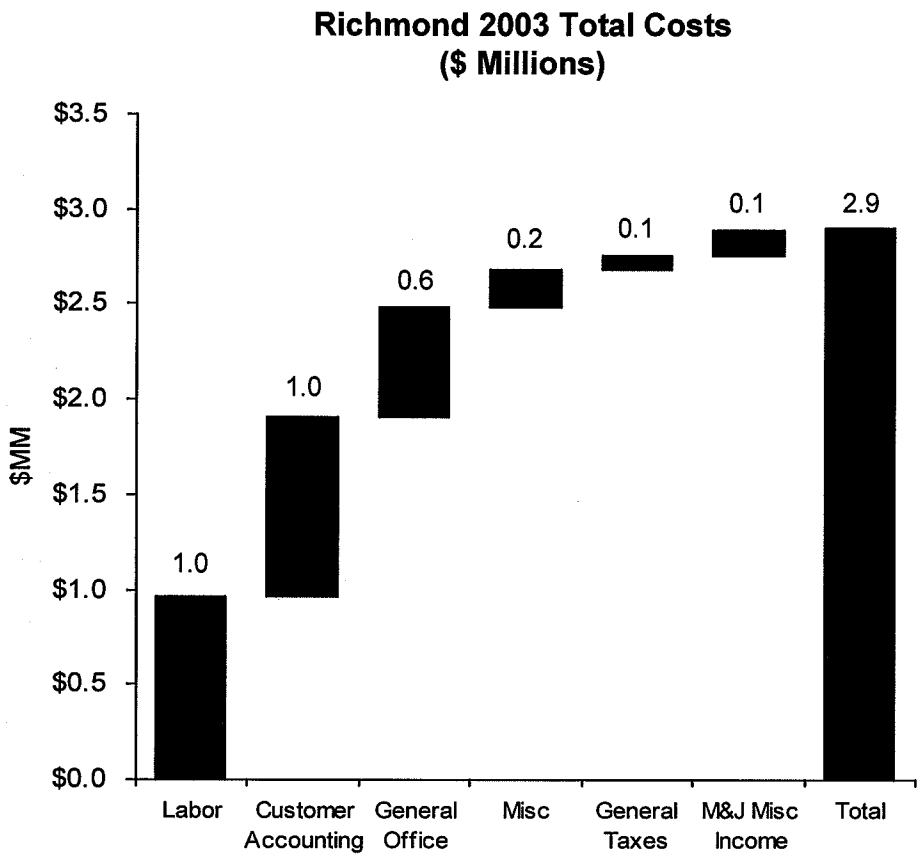


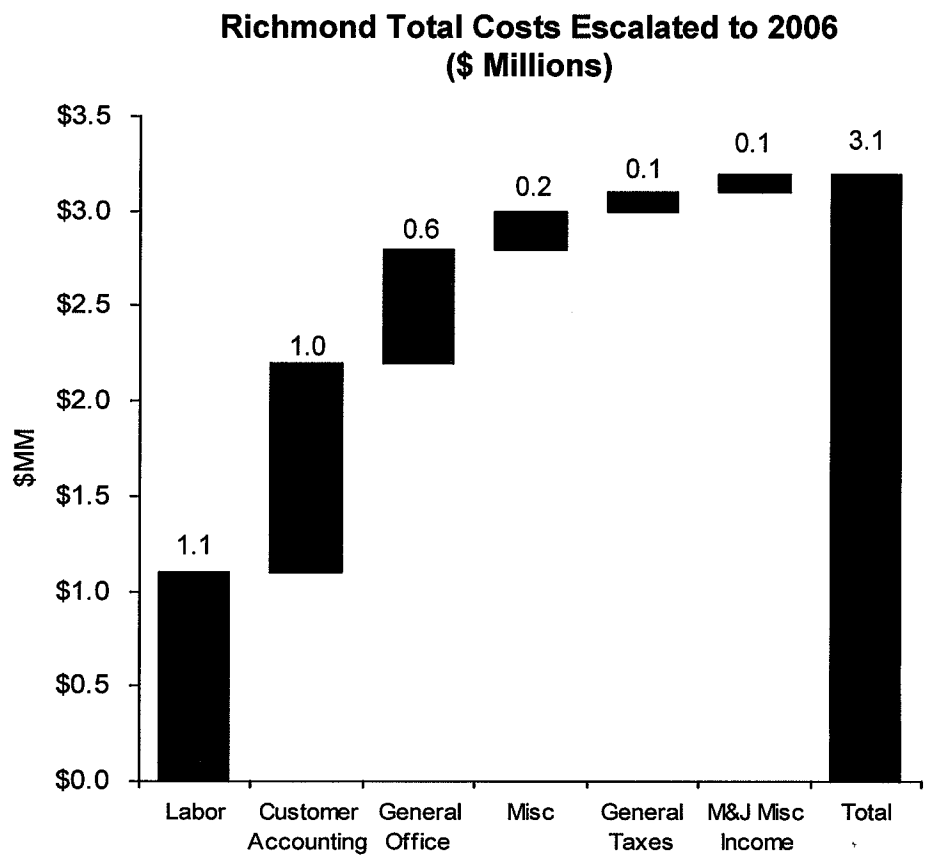




Source: American Water E-CIS

Exhibit AVJ – 11
Richmond O&M Costs

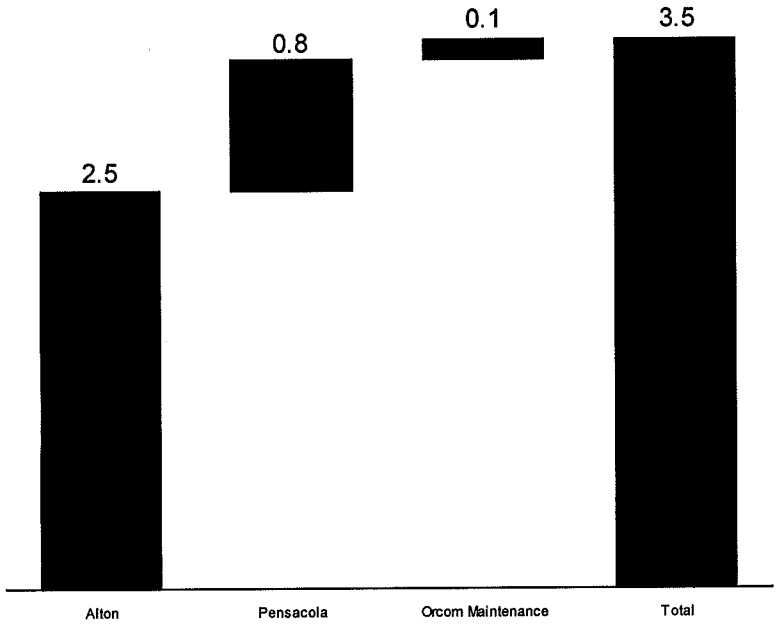




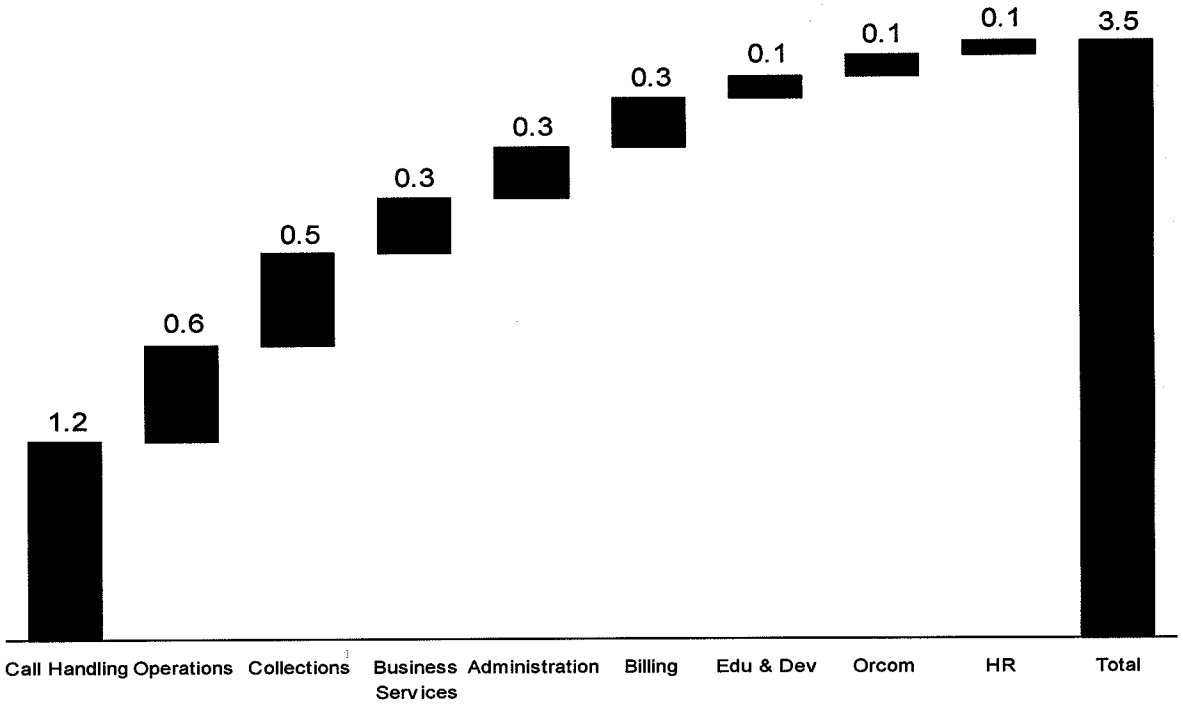
Source: American Water; Booz Allen analysis
Assumes 2.5% non-labor inflation, 4% labor inflation,

Exhibit AJV – 12
Customer Service O&M Costs

Indiana Customer Service O&M Breakdown (in 2006 $/Million)

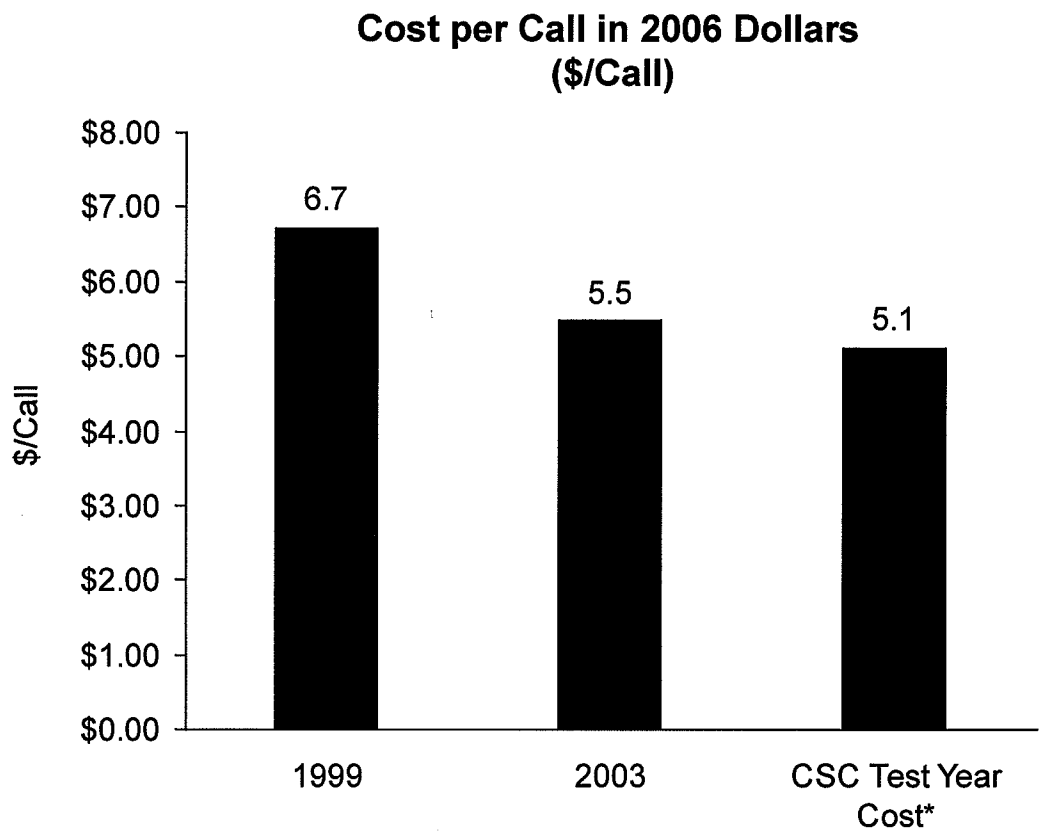


Test Year CSC O&M Cost Detail by Office (2006 $/Million)



Source: American Water "Orcom and Call Center IN"

Exhibit AJV – 13
O&M Cost-per-Call Comparison



** Test year defined as July 2005 through June 2006*
Source: American Water; Booz Allen analysis

ORIGINAL

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF INDIANA-AMERICAN WATER COMPANY, INC. FOR AUTHORITY TO INCREASE ITS RATES AND CHARGES FOR WATER AND SEWER SERVICE AND FOR APPROVAL OF NEW SCHEDULES OF RATES AND CHARGES APPLICABLE THERETO	)	CAUSE NO. 42520 APPROVED: NOV 1 8 2004

BY THE COMMISSION:
Judith G. Ripley, Commissioner
William G. Divine, Administrative Law Judge

INDIANA UTILITY REGULATORY COMMISSION

ORDER

CAUSE NO. 42520

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INDIANA UTILITY REGULATORY COMMISSION

ORDER

CAUSE NO. 42520

I. BACKGROUND

On September 30, 2003, Indiana-American Water Company, Inc. ("Petitioner," "Indiana-American" or "Company") filed its *Petition and Notice of Intent to File in Accordance with Minimum Standard Filing Requirements* ("Petition") with the Indiana Utility Regulatory Commission ("Commission"), seeking authority to increase its rates and charges for water and sewer service and for approval of new schedules of rates and charges applicable thereto. Petitioner's notice of its intent to file in accordance with the Commission's rules on minimum standard filing requirements ("MSFRs") was given pursuant to 170 IAC § 1-5-1 *et seq.* (2000).

Pursuant to notice and as provided in 170 IAC § 1-1.1-15 (2000), a Prehearing Conference was convened in this Cause on November 6, 2003, at 9:30 a.m. EST, in Room E306, Indiana Government Center South, Indianapolis, Indiana. Proofs of publication of the notice of the Prehearing Conference have been incorporated into the record and placed in the official files of the Commission. Attending the Prehearing Conference were Petitioner and the Indiana Office of Utility Consumer Counselor ("OUCC" or "Public"). The procedural, scheduling, and other matters determined at the Prehearing Conference were memorialized in the Commission's Prehearing Conference Order approved and issued on November 20, 2003.

Petitions to intervene in this Cause were filed on November 14, 2003, by the Town of Schererville; on December 12, 2004, by a group of industrial customers of Indiana-American ("Industrial Group"); and on February 13, 2004, by the Town of Merrillville. These petitions to intervene were granted by Docket Entries issued on December 5, 2003, December 29, 2003, and February 24, 2004, respectively, thereby making these entities parties to this Cause.

Pursuant to notice published as required by law, a public Evidentiary Hearing commenced on January 13, 2004, at 9:30 a.m. EST, in Room TC-10 of the Indiana Government Center South, Indianapolis, Indiana. Proofs of publication of the notice of such hearing were incorporated into the record of this proceeding by reference. During the Evidentiary Hearing conducted on January 13 and 14, 2004, evidence constituting Indiana-American's case-in-chief was offered and admitted into the record and its witnesses were offered for cross-examination.

On January 14, 2004, the Evidentiary Hearing was continued to January 27, 2004, for the purpose of conducting, pursuant to Ind. Code § 8-1-2-61(b), a public field hearing in the City of Gary, which is the largest municipality in Petitioner's service area. During this public field hearing, members of the public provided oral and/or written testimony in this Cause. On January 27, 2004, the Evidentiary Hearing was continued to February 18, 2004, for the purpose of conducting an additional public field hearing in the City of Jeffersonville, at which time members of the public provided oral and/or written testimony in this Cause. On February 18, 2004, the Evidentiary Hearing was continued to February 25, 2004, for the purpose of

conducting, in the City of Muncie, a third public field hearing, at which time members of the public provided oral and/or written testimony in this Cause.

On February 25, 2004, the Evidentiary Hearing was continued to March 5, 2004, the date established in the Prehearing Conference Order for the parties to present any settlement and evidence in support thereof. The parties advised that they had not reached any settlement and, on March 5, 2004, the Evidentiary Hearing was continued to April 19, 2004. During the Evidentiary Hearing conducted on April 19, 20 and 21, 2004, evidence constituting the respective cases-in-chief of the Public and the intervening parties was offered and admitted into the record and their witnesses were offered for cross-examination. In addition, Petitioner's rebuttal evidence was offered and admitted into the record, and Petitioner's rebuttal witnesses were offered for cross-examination. The Evidentiary Hearing in this Cause was adjourned on April 21, 2004.

Having considered all of the evidence presented in this proceeding, and based on the applicable law, the Commission now finds:

II. NOTICE AND JURISDICTION

Due, legal and timely notice of the Petition filed in this Cause was given and published by Petitioner as required by law. Proper and timely notice was given by Petitioner to its customers summarizing the nature and extent of the proposed changes in its rates and charges for water and sewer service. Due, legal and timely notices of the Prehearing Conference and the other public hearings in this Cause were given and published as required by law. Petitioner is a "public utility" within the meaning of that term in Ind. Code § 8-1-2-1(a)(2) and is subject to the jurisdiction of the Commission in the manner and to the extent provided by the laws of the State of Indiana. Accordingly, this Commission has jurisdiction over Petitioner and the subject matter of this proceeding.

III. PETITIONER'S CHARACTERISTICS

Petitioner is an Indiana corporation engaged in the business of rendering water utility service to approximately 272,000 customers in twenty-one (21) counties in the State of Indiana. Petitioner provides water service by means of water utility plant, property, equipment and related facilities owned, leased, operated, managed and controlled by it, which are used and useful for the convenience of the public in the production, treatment, transmission, distribution and sale of water for residential, commercial, industrial, sale for resale and public authority purposes. Petitioner also provides public and private fire service. In addition, Petitioner provides sewer utility service in Wabash County in Somerset, Indiana and in Delaware County in or near Muncie, Indiana.

IV. CORPORATE HISTORY

Indiana-American was formed in 1983 from the merger of five (5) Indiana water utility subsidiaries of American Water Works Company, Inc. ("American"). In 1993, Indiana-American acquired the common stock of Indiana Cities Water Corporation ("Indiana Cities"). Indiana Cities subsequently was merged into Indiana-American. In 1999, American acquired the

common stock of the parent company of Northwest Indiana Water Company ("Northwest"). Northwest was merged into Indiana-American on January 1, 2000. On February 1, 2000, Indiana-American acquired the common stock of United Water West Lafayette Inc. and United Water Indiana Inc. (collectively "United"), and on the same day United was merged into Indiana-American. Petitioner also has made a number of smaller acquisitions in recent years.

In addition, American was acquired recently by an international water company. American is a holding company that owns the common stock of subsidiaries (such as Indiana-American) which provide water utility services, wastewater utility services and other water resource management services to approximately fifteen (15) million people in twenty-eight (28) states and three (3) Canadian provinces. In 2003, American was acquired by Thames Water Aqua Holdings GmbH ("Thames Water"), a subsidiary and the water division of RWE AG, an international, multi-utility service provider, organized under the laws of the Federal Republic of Germany. RWE AG's core businesses are in electricity, water, gas, waste management and utility-related services. RWE AG is active in more than 120 countries on six (6) continents.

V. EXISTING RATES

Petitioner's existing basic rates and charges for water and sewer service were established pursuant to the Commission's Orders in Cause No. 42029 dated November 6, 2002; January 22, 2003; and December 30, 2003 ("2002 Rate Order"). Petitioner also implemented a Distribution System Improvement Charge pursuant to Ind. Code § 8-1-31 and the Commission's Order in Cause No. 42351-DSIC 1, dated February 27, 2003. Since its last rate case, Indiana-American also has implemented public fire protection surcharges in four (4) communities pursuant to Ind. Code § 8-1-2-103(d) and the Commission's Orders in Cause Nos. 42285, 42470, 42449 and 42566.

VI. RELIEF REQUESTED

Petitioner originally proposed that its rates be increased by 14.31%. (*Petitioner's Exhibit JLC-1, Sched. 1*, line 36.) Prior to the final hearing, Petitioner filed supplemental direct testimony and exhibits reducing the requested increase to 10.55% to reflect a rate base true-up, Petitioner's capital structure at December 30, 2003, the issuance of the Order in Cause No. 42029 dated December 30, 2003, regarding Petitioner's security expenses, and the receipt of some updated property tax information. (*Petitioner's Exhibit JLC-1-UA, Sched. 1*, line 36.) The requested increase was further reduced as a result of the filing by Petitioner of final property tax rates available from the Department of Local Government Finance as of the close of the record. These updated rates covered all counties where Petitioner has property except for Clark County. The effect of the updated property tax information is discussed in the *Property Tax* section of this Order. (*See* Sect. IX. B. 14.) In addition, Petitioner proposes further movement toward common rates in this proceeding.

VII. TEST YEAR

As provided in the Prehearing Conference Order, the test year to be used for determining Petitioner's actual and pro forma operating revenues, expenses and operating income under present and proposed rates is the twelve (12) months ended June 30, 2003. The financial data for

this test year, when adjusted for changes as provided in the Prehearing Conference Order, is a proper basis for fixing new rates for Petitioner and testing the effect thereof.

VIII. TESTIMONY FROM FIELD HEARINGS IN GARY, JEFFERSONVILLE AND MUNCIE

The Commission conducted three (3) public field hearings in this proceeding as forums for affected ratepayers to express their views about Petitioner's proposed rate increase. These field hearings were conducted in the northern part of the State in the City of Gary, in the southern part of the State in the City of Jeffersonville, and in the central part of the State in the City of Muncie. Below are summaries of the testimony presented in each of these field hearings.

A. City of Gary Field Hearing

This field hearing, conducted on January 27, 2004, at Indiana University Northwest, 3400 Broadway, Gary, Indiana, satisfied the requirement of Ind. Code § 8-1-2-61(b), which states:

> In any general rate proceeding under subsection (a) which requires a public hearing and in which an increase in revenues is sought which exceeds the sum of two million five hundred thousand dollars ($2,500,000), the commission shall conduct at least one (1) public hearing in the largest municipality located within such utility's service area.

Lawful notice of this public field hearing was published in newspapers serving Johnson, Lake and Marion Counties. Attending the hearing were representatives of the Petitioner, the OUCC, the Commission and members of the public. At the hearing, members of the public shared their concerns regarding Indiana-American's proposed rate increase, the Company's quality of customer service and water quality. In addition to the oral and written testimony received at the hearing, some individuals not in attendance at the field hearing mailed or electronically mailed comments to the OUCC, which were later filed with the Commission.

A majority of the oral and written testimony remarked on the frequency of Indiana-American's rate increases and the high rates of increase on Lake County consumers and those in the surrounding service area. Witnesses testified that most households have had two (2) water use and sewer rate increases in the last three (3) years, while other users cited three (3) rate increases. The consumers stated their water use rates were 38% higher than before Indiana-American purchased Northwest; another increase of approximately 14% would create a difficult burden on them and would be particularly hard on those individuals with fixed incomes. Witnesses remarked that any increase by the water utility would be unbearable, particularly given the broad increase in property taxes on Lake County residents. An individual consumer questioned the need for increased rates since the water sources were close to the service areas. Also, a representative of a municipal fire department noted that Indiana-American's proposed Public and Fire Protection rate increase appeared high and did not reflect the trend of minimal hydrant use in the community.

In addition, consumers maintained that the Commission should not order a rate increase to help the utility finance its increasing insurance costs, refinance the debt from facility

acquisitions or improve employee benefits and pensions -- priorities stated in the Company's informational materials included in billing statements. First, ratepayers asserted that Indiana-American should absorb these costs as part of doing business and not ask for additional funds from consumers to meet expected and predictable increases in operating and acquisition expenses. Reflecting on their own positions, ratepayers living on fixed pensions or Social Security benefits noted that they are expected to pay their increasing insurance and other financial obligations without seeking additional funds. Second, small business owners and local and state government representatives asserted that the parent company and Indiana-American's shareholders, not the ratepayers, should finance these expenses by reducing the anticipated rate of return on the company's investment or exercising more effective fiscal discipline. Many residents do not believe that consumers should compensate the company for acquiring investment property through higher rates.

While some individual consumers acknowledged Indiana-American's investments in the Northwest facility, other consumers noted better customer service and a better water product prior to the company's acquisition of Northwest and the other small water utilities. Concerned with water quality, many consumers reported having to purchase bottled water to drink due to their tap water's high chlorination and chemical odor and taste, all while paying higher water rates. Some residents complained of receiving very low estimated water use and sewer bills for months prior to receiving a significantly higher bill based on metered readings. One municipal entity stated that Indiana-American's lack of communication and cooperation when the municipality made road repairs resulted in additional road expenses after an underground water pipe burst.

B. City of Jeffersonville Field Hearing

This field hearing was conducted on February 18, 2004, at KYE's, 400 Missouri Avenue, Jeffersonville, Indiana. Lawful notice of the hearing was published in newspapers serving Clark, Floyd, Johnson and Marion Counties. Attending the hearing were representatives of the Petitioner, the OUCC, the Commission and members of the public. Witness testimony focused on the proposed rate increase, Indiana-American's presence in southern Indiana and ratepayers' water quality.

A majority of individuals testifying voiced concerns over Indiana-American's proposed rate increase. Citing Indiana-American's approved rate increase in 2002, individual ratepayers observed that Indiana-American waited less than two (2) full years before seeking another rate increase and that the Company's current proposal represents a distressing trend. Individuals expressed concern with the projected amount of the increase, which they perceived to be nearly three (3) times as great as the 2002 actual rate increase. One individual, recalling that Indiana-American promised that consumers would receive benefits and savings achieved through the Company's acquisition of other water utilities and building economies of scale, questioned the need for a rate increase before consumers received the promised savings. Other individual users stated that a rate increase, so soon after the last increase, combined with additional county assessments on water treatment and water run-off would further stress household budgets -- budgets already burdened by the statewide, court-ordered property tax reassessment. Many individuals in attendance voiced their opposition to increased rates that would allow Indiana-

American to improve employee benefit and pension plans and pay for existing facilities when the company will not improve water quality, be more responsive to customers and those with billing inquiries, implement a satisfactory complaint process or aid individuals on fixed incomes as permitted under Indiana law.

Witnesses offered mixed assessments of Indiana-American's impact on and presence in southern Indiana. Two individuals representing not-for-profit organizations promoting business interests in the region complimented Indiana-American's major investments in improving regional water distribution, installing new water mains and expanding water service to small communities. They acknowledged that Indiana-American's investments aided economic growth by improving the infrastructure necessary to retain and attract commercial users, and concluded that Indiana-American should be permitted to make a return on the company's investment. However, small business owners testified that the past rate increases and those proposed in this Cause would further burden their businesses and make it more difficult to compete against like businesses serviced by other, locally-owned water providers charging lower water usage and sewer rates. A business owner anticipated that another rate increase to support Indiana-American's facilities and employee pension and benefits packages would negatively impact his own plant and facility and employee salaries and benefits. An owner of a property management company, who had a negative experience with Indiana-American's Alton, Illinois Customer Satisfaction Center ("Customer Satisfaction Center," "Alton CSC," "Alton Center") in November and December 2003, did not believe his needs were adequately addressed by an out-of-state representative.

Lastly, individual homeowners and private landlords commented on the poor water quality coming from their home water taps. Those testifying asserted that their tap water smelled of chlorine for as few as two (2) to three (3) days per month to having a continuous odor. They claimed they did not drink their tap water, consuming bottled water instead. Also, they commented that they did not complete common household tasks (i.e., laundry) using tap water when the water was heavily chlorinated. One witness at the hearing would favorably consider Indiana-American's proposed rate increase if the water quality improved.

C. City of Muncie Field Hearing

The final field hearing in this Cause was conducted on February 25, 2004, at City Hall, 300 North High Street, Muncie, Indiana. Lawful notice of the hearing was published in newspapers serving Delaware, Johnson and Marion Counties. Attending the hearing were representatives of the Petitioner, the OUCC, the Commission and members of the public. At the hearing, attendees shared their concerns regarding Indiana-American's proposed rate increase and the Company's inadequate response to sewer problems in Farmington Meadows, a Muncie residential development. In addition to the oral and written testimony received at the hearing, some individuals not in attendance at the field hearing mailed or electronically mailed comments to the OUCC, which were later filed with the Commission.

Like residents at the prior field hearings, those attending the Muncie hearing voiced their strong disapproval of Indiana-American's recent proposal for water and sewer rate increases within two (2) years of filing the Company's last request. Echoing the comments of consumers in

Gary and Jeffersonville, some Muncie area residents urged the Commission to deny Indiana-American's proposed 15% to 19% rate increase to finance the company's increasing insurance costs, refinance the debt from facility acquisitions and improve employee benefits and pensions. Consumers stated that Indiana-American should pay for these expenses out of existing corporate funds and assets, such as anticipated profits, and not rely on consumers repeatedly to finance anticipated corporate expenses and planned acquisitions. Lastly, senior citizen and single-adult household consumers with limited incomes, particularly those living in the Farmington Meadows subdivision in Muncie, expressed their difficulty paying present high sewer and water rates, noting that increased rates by Indiana-American would strain their fixed budgets already pressured by increased taxes and rising insurance and health costs.

Residential consumers attending the field hearing reminded the Commission that Indiana-American provides all water service to Muncie residents, but only a portion of Muncie's sewer service, in the Farmington Meadows subdivision; the Muncie Sanitary District ("MSD") provides sewer service to residences surrounding Farmington Meadows and beyond. The president of the Farmington Meadows Association and many members of the Association supplied testimony and written comments noting that that Indiana-American has been aware of a problem with one of the sewer lines from the subdivision but has failed to identify, communicate precisely or remedy the problem. The utility's failure to communicate and act has resulted in subdivision residents paying a flat monthly rate for sewer service that amounts to more than double the amount an average resident is charged by MSD. Farmington Meadows residents voiced displeasure with their current high sewer and water rates and strongly opposed any increase in sewer or water rates without dramatically improved customer service and maintenance.

IX. RATE BASE

A. Original Cost

In its case-in-chief, Petitioner presented the actual plant balances at the end of June 2003 and August 2003 and a pro forma rate base reflecting projected changes in Petitioner's rate base components. Petitioner's proposed rate base in its proposed order also reflects the retirement of the old water intake tunnel in the Northwest Operation and the retirement of computers no longer being used. In its supplemental direct testimony and exhibits, Petitioner updated its rate base to reflect actual balances as of December 31, 2003, and the actual cost of the Enhanced Customer Information System ("E-CIS") project. The amount included for the E-CIS project in the original filing was estimated. For the purpose of our consideration of the E-CIS project, we find that it meets the definition of "major project" in the MSFRs and was placed in service on March 8, 2004, which is more than ten (10) business days before the final hearing. However, we also note the OUCC maintains that the E-CIS project was purchased by Indiana-American's parent company and Indiana-American's allocated portion should be considered an operating cost and part of Indiana-American's costs of participating in the Alton Customer Satisfaction Center.

There were five (5) contested differences between Petitioner's original cost rate base and that of the OUCC. The OUCC proposed the following exclusions from rate base: (1) the cost of one well in the Seymour Operation and one high service pump in the Southern Indiana

Operations and Treatment Center ("SIOTC"), (2) the E-CIS project[1], (3) certain assets for which it said it could not find sufficient detail, (4) certain replacement meters and (5) the Company's building in Richmond. There is a sixth difference resulting from the OUCC's proposal to change our policy of allowing depreciation expense on contributions in aid of construction ("CIAC") and the OUCC's corresponding amortization of CIAC, which we shall address in our discussion of operating expenses. (*See,* Sect. XI. B. 4. Depreciation Expense on Contributions in Aid of Construction.) The Company did not contest the OUCC's elimination of acquisition adjustments for the Turkey Creek and Westwood acquisitions. No other party presented evidence on original cost rate base.

1. Excess Capacity

OUCC's Position. Roger A. Pettijohn, a Utility Analyst for the OUCC's Sewer/ Water/Rates Division, proposed to remove from Petitioner's rate base as excess capacity one of the five (5) wells used by Petitioner to provide service in the Seymour Operation. (*Public's Exhibit 4*, p. 10, lines 9-19.) Mr. Pettijohn testified that Seymour's peak day usage is approximately four (4) million gallons per day ("MGD"). Because each of the five (5) wells is individually capable of producing 1,100 gallons per minute or 1.54 million gallons per day, Mr. Pettijohn believed only three (3) of the five (5) wells are needed to meet the peak day usage for Seymour. (*Id.* at p. 10, lines 13-15.) Mr. Pettijohn proposed a similar adjustment for the SIOTC, removing as alleged excess capacity one high service pump. (*Id.* at p. 10, line 20 through p. 11, line 3.) Mr. Pettijohn testified that according to the *Recommended Standards for Waterworks* only four (4) high service pumps were necessary to meet peak demand with the largest pumping unit out of service. (*Id.* at p. 10, lines 20-23.) As a result of Mr. Pettijohn's recommendations, the OUCC proposed to remove $987,967 from utility plant in service and $253,441 from accumulated depreciation.

Petitioner's Rebuttal. Petitioner's witness Alan J. DeBoy, Vice President of Engineering for Indiana-American, explained why it was necessary to construct five (5) wells in Seymour and five (5) high service pumps at the SIOTC. (*Petitioner's Exhibit AJD-R*, p. 4, lines 5-8; p. 5, lines 17-19.) With respect to Seymour, Mr. DeBoy testified that if the total nominal capacity of three (3) of the five (5) wells is simply summed, it would suggest those three (3) wells have capacity to supply enough water to meet the Seymour peak day usage. However, this ignores the impact each well has on the others. He testified that the actual capacity of the wells is below the simple sum of the nominal capacities when three (3) or more are running simultaneously. (*Id.* at p. 4, lines 5-8, 11-12.) Mr. DeBoy explained that this is because the wells have an influence on each others' individual capacity due to pumping level impact (aquifer

[1] Petitioner witness Mr. James L. Cutshaw, a Senior Financial Analyst for Indiana-American, filed supplemental testimony and requested that the Commission approve the return on and of $6,248,821 related to the purchase and development of the E-CIS software. (*Petitioner's Exhibit JLC-U*, pp. 7-9; *Petitioner's Exhibit JLC-UA*, line 21, col. 2.) The OUCC recommended that the $6.2 million associated with the E-CIS software be disallowed and removed from rate base and that Petitioner be denied the $282,528 in amortization costs of the $1.3 million deferred asset balance associated with the conversion to the Alton CSC. Finally, the OUCC recommended that the Commission accept its $194,360 downward adjustment to offset the increased O&M costs that are embedded in Petitioner's management fee adjustment for the Customer Satisfaction Center. Given the assertions of the OUCC and the relationship between the Alton CSC and the E-CIS software, we will address both of these items in the Operating Expense section of this Order. (*See* Sect. XI. B. 5. Operating Results Under Present Rates.)

characteristics) and hydraulic condition changes under different flow rates. (*Id.* at lines 14-17.) Mr. DeBoy noted that historical operating data indicates that when various combinations of three (3) wells in Seymour operate simultaneously, the combined output ranges from 3.9 MGD to 4.1 MGD, which is below the maximum day of 4.3 MGD recorded in August 2002. (*Id.* at lines 17-23.) Consequently, four (4) simultaneously operating wells are necessary to satisfy the current maximum day demand leaving one well for back-up should a failure occur in one of the other wells. (*Id.* at p. 5, lines 1-3.)

Mr. DeBoy also testified that Mr. Pettijohn had not taken into account the design and construction characteristics of the SIOTC clear water reservoir in evaluating the number of high service pumps necessary to meet Petitioner's peak demand. (*Id.* at lines 17-19.) Mr. DeBoy explained that the SIOTC clear water reservoir was designed to include two (2), one million gallon compartment areas so that either of the one million gallon compartments can be removed from service for maintenance or rehabilitation. (*Id.*) Three (3) pumps serve the west reservoir and have a total capacity of 28 MGD, and two (2) serve the east reservoir and have a total capacity of 22 MGD. (*Id.* at p. 5, line 22 through p. 6, line 5.) Mr. DeBoy testified that all five (5) of the pumps are necessary to ensure that Petitioner can meet its peak demand with one of the reservoirs out of service.

Commission Discussion and Findings. In the rate order we approved for Petitioner in 1997, we listed factors that must be addressed in considering the appropriate level of capacity:

> (1) The prudence of the decision to construct the new plant;
>
> (2) The reasonableness of the demand forecasts;
>
> (3) Whether there were changed circumstances during construction necessitating a reevaluation of the decision to continue with construction;
>
> (4) The lead time to construct new facilities;
>
> (5) The necessity to provide adequate and reliable utility service;
>
> (6) The utility's need for a margin of safety or reserve;
>
> (7) The financial impact on the utility of a finding of excess capacity and the long-term effect on the ratepayers; and
>
> (8) The risk that changes in demand projections will impact the utility's reserves and ability to serve its customers.
>
> *N. Ind. Pub. Serv. Co.*, Cause No. 37458, 67 PUR4th 396, 401-02 (PSCI, Date Issued June 19, 1985). To this we will add another factor particularly important for water utilities -- the utility's need to comply with the requirements of environmental agencies.

Ind.-Am. Water Co., Cause No. 40703, 15-16 (Indiana Utility Regulatory Commission, Order Issued Dec. 11, 1997) ("1997 Rate Order").

In its rebuttal testimony, with respect to the Seymour wells, Petitioner explains that the simultaneous running of the various wells results in a capacity level that is less than the sum of each individual well's capacity. The OUCC's contention that only four (4) wells are necessary is based on the sum of each individual well's capacity. Petitioner explains that four wells would need to run simultaneously in order to achieve the historical daily maximum capacity of 4.3 MGD, even though the nominal capacity of each well is 1.54 MGD. Under such circumstances, Petitioner would have only one backup well. We find that Petitioner has demonstrated an appropriate level of capacity with respect to its five (5) Seymour wells.

Regarding the five (5) pumping units at the SIOTC, the OUCC relies on the recognized expertise of *Recommended Standards for Waterworks* to demonstrate that Petitioner has excess pumping capacity of 15.7 MGD with its largest pumping unit out of service. Petitioner attempts to rebut this contention by discussing an isolation feature in the clear water reservoir associated with the high service pumps in question. This feature is explained as the ability to divide the reservoir into two (2), one million gallon compartments, and to take one compartment out of service for rehabilitation and maintenance work while the other compartment is in service. According to Mr. DeBoy, each compartment should have pumping capacity to meet peak day demand, and therefore, no excess capacity currently exists.

Mr. DeBoy's rebuttal testimony indicates that this feature has not yet been used but will be needed "at some point in the future." The non-contradicted evidence established that Petitioner, with the largest unit out of service, has 15.7 MGD more capacity than the required 22 MGD. Since Petitioner's case to reject the alleged excess capacity is founded on justifying the need to have this reservoir-isolation technique, we thus need to determine whether this feature is used and useful. Mr. DeBoy's testimony on this point is limited to testifying that reservoir maintenance will be needed at some point in the future. We note that this is the first time this specific feature has been brought to our attention and has not been a contested issue in Petitioner's previous cases. Therefore, we shall make our decision based on the evidence of record that we now have before us. We find that Petitioner did not provide evidence to support the time frame within which this engineering feature will be used and useful. Further, we find Petitioner's evidence lacked information that we deem necessary in order to allow this plant in rate base, this information includes but is not limited to:

- the frequency that the reservoir maintenance occurs,
- the amount of time necessary to carry out the maintenance of the reservoir,
- the time of year when Petitioner plans to carry out the maintenance of the reservoir,
- whether Petitioner could implement the reservoir maintenance during non-peak months, and
- whether Petitioner needs five (5) pumps at the SIOTC if the reservoir's maintenance could be implemented during non-peak months.

We find that Petitioner's rate base should be reduced by $753,378 for excess capacity at the SIOTC and that the accumulated depreciation should be also reduced by $232,248.

2. Miscellaneous Rate Base Reductions

OUCC's Position. OUCC Utility Analyst Dana M. Lynn proposed several adjustments based on two (2) issues that resulted in a reduction to Petitioner's proposed original cost rate base of $179,994. The first issue raised by the Public was Petitioner's failure to provide adequate support for the level of costs it proposed to include in rate base. Ms. Lynn testified that Petitioner added over $149 million in fixed asset additions over the last three (3) years. She testified that she made numerous attempts to review a small percentage of Petitioner's utility plant. She explained that, on numerous occasions, she addressed questions to Indiana-American employees James L. Cutshaw, a Senior Financial Analyst for Petitioner; William J. Wolf, Petitioner's Director of Rates and Planning; and Ms. Sharon Keeney, Mr. DeBoy's Assistant. She also provided both informal and formal discovery to attempt to review fixed asset records. (*Public's Exhibit 3*, p. 18, lines 22 through p. 19, line 8.) She testified that the documentation Petitioner ultimately provided almost two (2) months later through a formal request was still inadequate. (*Id.* at p. 17, lines 21-23.) Ms. Lynn stated that Petitioner's delay substantially limited the amount of time for the OUCC's review. (*Id.* at p. 22, lines 26 through p. 23, line 2.) Ms. Lynn pointed out that it took Petitioner several attempts to provide the detail that it purported would support her request. Ms. Lynn testified that of the ten (10) fixed asset additions she ultimately reviewed, Petitioner provided adequate support for only one-half of those. The OUCC has proposed that the remaining five (5) assets be reduced from Petitioner's rate base by $170,703, which is the amount that Petitioner failed to support. (*Public's Exhibit 3, Sched. DML-1*, p. 1.) Ms. Lynn stated that none of Petitioner's staff could successfully retrieve full information from Petitioner's computerized accounting system. (*Public's Exhibit 3*, p. 19, lines 16-20.)

The second issue raised by the Public was Petitioner's accrual of Allowance For Funds Used During Construction ("AFUDC") on comprehensive planning studies, amendments to comprehensive plans and tank inspections reports. Ms. Lynn proposed to reduce Utility Plant in Service and Accumulated Depreciation by $13,380 and $4,089, respectively. Ms. Lynn further testified that Petitioner accrued AFUDC in excess of the cost of the tank inspection reports Petitioner capitalized in 2002. She explained that Accounting Instruction 19 in the 1996 National Association of Regulatory Utility Commissioners' ("NARUC") Uniform System of Accounts for AFUDC states that "AFUDC includes the net cost for the period of construction of borrowed funds used for construction purposes and a reasonable rate on other funds when so used." (*Id.* at p. 24, lines 1-3.) She stated that comprehensive planning studies and tank inspections are not considered a capital asset under NARUC's description of components of construction. (*Id.* at lines 7-13.) Ms. Lynn stated that these costs are more properly considered maintenance costs and should not be included as a component of rate base. She stated that Petitioner defines maintenance costs by referring to the NARUC Uniform System of Accounts:

> - Inspecting, testing, and reporting on condition of plant specifically to determine the need for repairs, replacements, rearrangements and changes, and inspecting and testing the adequacy of repairs which have been made.

- Work performed specifically for the purpose of preventing failure, restoring serviceability or maintaining life of plant.

Id. at lines 16-24.

Ms. Lynn explained that comprehensive planning and tank inspections are clearly defined as maintenance costs and Petitioner should not capitalize these costs and, moreover, should not accrue AFUDC. The net effect of Ms. Lynn's adjustment is a recommended reduction to rate base of $9,291.

Petitioner's Rebuttal. Petitioner's witness DeBoy testified that he reviewed the specific projects where Ms. Lynn recommended rate base adjustments due to recorded expenditures that were not fully supported and stated he was able to substantiate and verify the appropriateness of all costs booked for these projects. (*Petitioner's Exhibit AJD-R*, p. 8, lines 21-23.) He stated copies of the supporting information for these assets are found in Petitioner's Exhibit AJD-R1. Mr. DeBoy explained in step-by-step fashion how the supporting information was retrieved from Petitioner's computerized accounting system. Mr. DeBoy testified that additional assistance can be provided to the OUCC in the future to satisfy its audit process. (*Petitioner's Exhibit AJD-R*, p. 9, lines 10-12.) As to Petitioner not supporting the cost of a building in Richmond that had been used to house Petitioner's call center, Mr. Cutshaw testified that once Petitioner responded to the Public that it did not have the purchase agreement for the Richmond Building, he did no further research until the Public filed its testimony and exhibits which excluded the building purchased in 1994. (*Petitioner's Exhibit JLC-R*, p. 3, lines 12-17.) In its rebuttal testimony, Petitioner provided a warranty deed and a memo memorializing the terms of the agreement. Mr. Cutshaw testified that only $435,332 of the purchase price has been included in rate base since Cause No. 40103 (Cause No. 40103, 169 PUR4th 252 (Indiana Utility Regulatory Commission, Date Issued May 30, 1996), "1996 Rate Order").

Petitioner's witness Mr. Wolf explained why Petitioner was unable to provide the data requested by the OUCC. He testified that the fixed asset records requested by Ms. Lynn are not routinely accessed by Petitioner's finance staff. Instead, the Petitioner's field personnel are proficient at navigating this part of Petitioner's J.D. Edwards accounting system because they use it on a daily basis. Mr. Wolf testified that in future cases, Petitioner's finance staff will undergo further training so as to be more helpful. (Tr. pp. H-66 - H-67.)

Mr. DeBoy also responded to the accrual of AFUDC. He testified the comprehensive planning studies and tank inspections are engineering functions that ultimately lead to capital projects. Since engineering functions which lead to capital projects are typically capitalized and AFUDC accrued, Mr. DeBoy testified that Ms. Lynn's adjustment should be rejected. (*Petitioner's Exhibit AJD-R*, p. 9, lines 18-22.)

Commission Discussion and Findings. Our concern about Petitioner's fixed asset records not being accessible to the Public was previously discussed in our Order in Cause No. 42029, wherein we stated the following:

> We are troubled by the uncontroverted revelations of Ms. Lynn, wherein she noted the difficulties that Public encountered in attempting to confirm the

> accuracy of fixed asset additions due to the conversion of data in October 1998 to a new J.D. Edwards accounting system and supporting detail not being easily accessible. When Petitioner made this conversion, it combined each fixed asset account into one amount. Petitioner's staff stated that detail existed at a location off-site in the form of ledger books and detailed report binders and that the hiring of additional personnel would be necessary to retrieve the information requested for review. As a result, all supporting detail could not be produced without an exhaustive effort by Petitioner's staff as well as OUCC audit staff. Ms. Lynn did not adjust rate base for $41,588 in interior design fees[;] $194,477 in cubicles, countertops, overhead cabinets, filing cabinets and electrical services, associated with the displaced employees from the shared service initiative[;] and $241,362 for office remodeling for the Gary location that she could not reconcile due to inadequate documentation.

Ind.-Am. Water Co., Inc., Cause No. 42029, 22-23 (Indiana Utility Regulatory Commission, Date Issued Nov. 6, 2002).

It appears that our concern raised in Order Nos. 42029 and 42043 about the adequacy and accessibility of Petitioner's fixed asset records has not been fully addressed. (*See 2002 Rate Order* and *Ind.-Amer. Water Co.*, Cause No. 42043 (Indiana Utility Regulatory Commission, Date Issued Nov. 20, 2002).) Petitioner has added over $149 million in fixed assets over the last three (3) years and requests that we include these improvements in rates. Petitioner did not dispute any of the difficulties raised by Ms. Lynn and in fact concurred that they could not provide her the documentation she needed to review fixed assets. (*See Petitioner's Exhibit WJW-R;* Tr. p. H-66, lines 9-12.)

A review of the documentation provided by Mr. DeBoy to rebut Ms. Lynn's adjustment suggests, for the most part, a lack of adequate documentation. For example, the documentation Petitioner provided to support the $70,458 for the tank painting located at Interstate 65 includes $24,246 identified as a monthly allocation of CWIP overhead and an additional $30,709 in engineering fees that are supported by nothing more than a print screen from Petitioner's J. D. Edwards system. There is nothing to explain why these costs were necessary and what was included in these costs. Furthermore, it appears from Petitioner's documentation that at times it charges engineering costs based on monthly allocations and not as direct charges. Also, for example, the credit card statement for Jeff G. Robinson does not add to the reconciliation provided by Petitioner. There are no references that tie any of the task order numbers to the asset numbers identified by Ms. Lynn, and it appears that certain assets have more than one task order number. Finally, Petitioner paid over $3,800 in sales tax for a piece of equipment that is used in the provision of providing water, thus, sales tax should not have been paid.

Given this recurrence of the OUCC's inability to fully obtain needed information from Petitioner, it seems reasonable to conclude that Indiana-American has been unwilling to fully cooperate in allowing the OUCC to carry out its responsibility to protect the public interest when a public utility is seeking a rate increase. A full review of the OUCC's testimony on this issue reveals unacceptable responsive conduct by Petitioner to discovery requests made by the OUCC. Petitioner has presented no acceptable reason as to why any of the information sought by the OUCC, whether in electronic or paper form, should not be readily available, organized and, if

needed, explainable. What confounds Petitioner's conduct all the more is, first, that the OUCC's responsibility as the public advocate in a proceeding such as this is well explained by statute, including its right to examine Petitioner's records. Second, by filing for relief under the Commission's MSFRs, Petitioner is seeking a resolution to its request for a rate increase within an expedited timeframe. This expedited timeframe does not allow for any party to have to endure an unreasonable lack of cooperation in its discovery efforts. Petitioner has stated that it can be more helpful in future cases. We hope so. In the meantime, having reviewed the OUCC's frustration as well as the information actually provided and not provided by Petitioner, we find, with the exception of the Richmond building, that Petitioner has not adequately supported the costs associated with the assets Ms. Lynn removed from rate base and find that these assets should be removed from Petitioner's proposed rate base. With respect to the Richmond building, we find the warranty deed provided by the Petitioner adequately supports the amount included in the rate base.

Finally, we agree with the Public that Comprehensive Planning Studies and Tank Inspection Reports are not components of construction and, therefore, should neither be capitalized nor accrue AFUDC. Petitioner claimed these costs are "engineering functions" that ultimately *lead* to capital projects, and we agree. (*Petitioner's Exhibit AJD-R*, p. 9, line 19.) These engineering functions are used to evaluate what Petitioner's system may or may not need. A comprehensive plan is typically a current and projected analysis of a utility system's needs, and tank inspections are performed to evaluate the condition of a tank. Both tank inspections and comprehensive plans involve inspections, testing and reporting on the condition of plant specifically to determine the need for repairs, replacements, rearrangements and changes. These types of engineering functions can also be performed specifically for the purpose of preventing failure, restoring serviceability or maintaining life of plant. Based on Petitioner's definition of maintenance expense and the Accounting Instruction contained in the NARUC Uniform System of Accounts that defines AFUDC, tank inspections and comprehensive planning studies should not be considered a component of construction and, thus, should not be included as a capitalized cost that accrues AFUDC. We believe that comprehensive plans are for planning and a Preliminary Engineering Report ("PER") may be developed from this plan, but it is the PER that is part of the construction project. Neither a comprehensive plan nor a tank inspection report is ever placed in service. It is unreasonable to suggest that AFUDC should accrue on planning tools that may identify the need to develop a project in the future. Accordingly, we accept the OUCC's net adjustment, and reduce rate base by $9,291. We direct Petitioner for all future costs associated with tank inspections and comprehensive planning to expense these costs as they occur.

The Public has raised another issue associated with Petitioner's Tank Inspection Reports that merits discussion. According to the OUCC, Petitioner's early retirement of these assets allows Petitioner to forever earn a return on the undepreciated balance of the asset retired. Public's Exhibit 3, Attachment No. 13, page 1, offered by Ms. Lynn, shows that Petitioner recorded $62,301 for its 2002 tank inspection costs in account #339600 - Other P/E CPS Post 1997, shown in the Asset Cost Subsidiary column. The annual depreciation would equal $12,460 ($62,301/5-years), with a depreciation accrual rate for this account of 20% or five-years. It was undisputed that the tank inspections costs were retired within a year of being recorded in Utility Plant in Service.

Thus, Petitioner will earn a return on assets that are no longer used and useful in the provision of Petitioner's water utility service. It is unreasonable for Petitioner to accrue AFUDC in excess of the cost for any asset. The Public provided undisputed evidence that Petitioner accrued $40,623 in AFUDC on its 2002 tank inspection reports that cost only $21,678. Petitioner capitalized these costs and then retired them the following year. Petitioner has over 100 tanks that it inspects and the Public only looked at one year in which five (5) tank inspections were completed. This is a valid issue raised by the OUCC, and further justifies our direction to the Petitioner to not capitalize these costs, but to expense them as they occur.

3. Muncie Meters

OUCC's Position. OUCC witness Roger Pettijohn testified that Muncie operations manager, Randy Moore, informed him that Petitioner is replacing meters every five (5) years in Muncie. Mr. Pettijohn testified that a ten (10) year replacement program is more reasonable because Muncie water meters undergo no unusual conditions with respect to water quality, pressure or volume. Mr. Pettijohn testified Petitioner spent $773,264 over a two (2) year period for meters, and that $353,989 was designated as new meters for new installation. Mr. Pettijohn proposed an adjustment to Petitioner's meter purchases pursuant to implementing a ten (10) year replacement program. He proposed that Indiana-American's annual meter allotment of $386,000 should be reduced by half ($193,000). The OUCC also proposed to reduce accumulated depreciation by $71,772.

Petitioner's Rebuttal. In rebuttal, Duane D. Cole, Vice President of Operations for Indiana-American, disagreed with Mr. Pettijohn's proposed adjustment, asserting that it is based on incorrect or misunderstood information. Mr. Cole testified that Petitioner's policy for meter replacement for all of its operations, including Muncie, is ten (10) years. Mr. Cole claimed that Muncie operations manager, Randy Moore, said that the ten (10) year replacement policy has been and currently is being followed. Mr. Cole stated that there is no need to adjust the annual meter purchases because the ten (10) year replacement program that the OUCC supports is already in effect. (*Petitioner's Exhibit DDC-R*, pp. 4-5.)

Commission Discussion and Findings. Petitioner and the OUCC seem to agree that Muncie spent an average of approximately $383,000 on meters in calendar years 2002 and 2003; that Muncie spends approximately $50 for a 5/8 inch meter (*Public's Exhibit 1, Attach. RAP-6*); and that a ten (10) year change-out program is advisable for Muncie. Since Muncie has a residential base of approximately 24,000 services, a ten (10) year meter change out program would require 2,400 meters per year at a cost of approximately $120,000 per year. With the $383,000 per year Muncie actually incurred for meter replacement, Muncie would have purchased 7,660 meters ($383,000 ÷ 50) in each of the last two (2) years.

In rebuttal, Petitioner did not challenge any of the OUCC's calculations, but confined its rebuttal testimony to disputing the OUCC's assertion that the Muncie operation employs a five (5) year meter replacement program. In a post-hearing reply brief to the OUCC's proposed Order, Petitioner argued that had it known the OUCC's testimony with respect to the amounts spent for meter replacement were relative to the *Muncie* operation it would have submitted rebuttal testimony that these are *total company* numbers. We find this argument to be unreasonable. The whole of the OUCC's direct testimony on this issue is found within a discreet

discussion titled the "Muncie Water District." We have no hesitation in concluding that the OUCC was presenting testimony confined to meter replacement in Muncie. If Petitioner thought the OUCC was discussing amounts attributable to all of Petitioner's meter replacements, it should have been obvious that a recommendation by the OUCC to reduce by half the total Company amount for meter replacements was misplaced in the context of a concern limited to the Muncie Water District. Based on the evidence presented, we find that a ten (10) year meter replacement program has not been but should be put into place. Therefore, we approve the OUCC's proposed adjustment to Petitioner's annual meter purchases in the Muncie district.

B. Acquisition Adjustments

1. Northwest Acquisition Adjustment

Prior to its merger into Petitioner, Northwest was a public utility providing water utility service to approximately 65,000 retail customers in Lake and Porter Counties. Northwest also provided wholesale service to various communities and utilities in those counties. On June 25, 1999, Northwest's ultimate parent company, National Enterprises, Inc. ("NEI"), was acquired by American for stock valued at $475 million. (*Petitioner's Exhibit JEE*, p. 21.) Of that amount, $48,752,000 was allocated to the Northwest acquisition. (*Id.* at p. 22.) It has been Petitioner's contention that this exceeded the book value of Northwest's equity by $21.472 million. Pursuant to approval granted by the Commission in its December 15, 1999 Order in Cause No. 41484, Northwest was merged into Petitioner effective January 1, 2000, with Petitioner being the surviving corporation. Thereafter, Petitioner commenced service in the areas and to the customers previously served by Northwest.

On February 1, 2000, one month after the Northwest merger, Petitioner acquired all of the common stock of United, and on the same date these two companies were merged into Petitioner. (*Petitioner's Exhibit JEE*, p. 23.) The United acquisitions resulted in the creation of another acquisition adjustment in the amount of $12,405,032. (*Id.* at p. 25.)

In Cause No. 42029, Petitioner proposed that the revenue requirement used to set its rates includes a fair value increment to net operating income ("NOI") reflecting a return on the Northwest and United acquisition adjustments, as well as a much smaller acquisition adjustment relating to Petitioner's acquisition of the Cementville system from Watson Rural Water Company; Petitioner sought an acquisition adjustment for Watson Rural consistent with the Commission's treatment of the Indiana Cities acquisition adjustment. In support, Petitioner submitted evidence on the aggregate cost savings achieved by the Northwest and United acquisitions and non-monetary benefits from the acquisitions, including improved service.

Our analysis in the 2002 Rate Order concluded that Petitioner should not be allowed favorable ratemaking treatment for the Northwest and United acquisition adjustments. Further, Petitioner asked us to reconsider this finding in its *Petition for Rehearing and Reconsideration* filed in that Cause which we again denied. Petitioner is not, in this proceeding, seeking a return on the United acquisition adjustment.

Petitioner's Position. John E. Eckart, President of Indiana-American, testified that in this case Petitioner has responded to our 2002 Rate Order by quantifying the amount of the

savings found by the Commission in that Order that resulted solely from the Northwest acquisition. He said these savings are greater than the revenue requirement relating to the amount by which the purchase price allocated to Northwest exceeded the book value of Northwest's common equity, which equals the Northwest acquisition adjustment. Based on this analysis, Petitioner proposes that the Commission authorize a fair value increment sufficient to allow it to earn a reasonable return on the Northwest acquisition adjustment. Mr. Eckart asserted that when the Northwest acquisition is viewed separately, the standard set out in the 2002 Rate Order for recognition of the Northwest acquisition adjustment is easily satisfied.

Wayne W. Brownell, Vice President of Finance for Indiana-American, testified on the quantification of the cost savings from the Northwest acquisition accepted by the Commission in the 2002 Rate Order, identifying for each type of savings the page of the Order where findings on the cost savings are made. (*Petitioner's Exhibit WWB*, p. 11.) In most cases the findings related to the Northwest and United acquisitions are in the aggregate. However, Mr. Brownell explained that, by reference to testimony and exhibits of the OUCC and work papers submitted pursuant to the MSFRs, the share of the savings attributable to Northwest alone can be determined. (*Id.* at p. 12.) Mr. Brownell testified that the Northwest portion included operation and maintenance expense savings of $2,718,463 per year and investment savings of $312,030. (*Petitioner's Exhibit WWB-5*, p. 1.) Applying the cost of capital determined in the 2002 Rate Order to the net amount of the Northwest acquisition adjustment (the original acquisition adjustment of $21.472 million less the accumulated amortization as of each year through 2004), Mr. Brownell computed an excess of savings over revenue requirement as follows:

Year	Savings minus Revenue Requirement
Acquisition	($19,529)
1999	$15,583
2000	$85,810
2001	$156,035
2002	$226,260
2003	$296,487
2004	$366,712

Id.

Mr. Brownell testified that Petitioner investigated whether the savings quantified in the 2002 Rate Order continue to be achieved in the same or a greater amount. Mr. Brownell discussed each type of savings and explained how the sustainability of the savings had been confirmed. In the case of the labor cost savings, for example, the Northwest Operation employee level is actually lower now than at the time of the last rate case. Mr. Brownell said the lower employee count meant that the labor cost savings included in his analysis are underestimated by about $450,000.

Mr. Eckart testified that the acquisitions of Northwest and United are directly related to solving the problem of small and troubled water utilities because they added many new operating centers (hubs) from which extensions can be made (spokes) to reach small and troubled systems within a reasonable radius. He stated that it is feasible for larger well-run and financially-sound

utilities to acquire small and troubled utilities when they are within twelve (12) to twenty-five (25) miles of a hub. He referred to this as the "hub and spoke" approach to consolidation and regionalization. He also identified a presentation by the Chief of Staff of the USEPA's Office of Ground Water and Drinking Water recognizing that the geographic proximity to larger systems is key to resolving the infrastructure challenge faced by small water utilities. (*See Petitioner's Exhibit JEE-3.*) Mr. Eckart also testified that small systems become subject to more strict USEPA standards after they are acquired by Petitioner.

OUCC's Position. E. Curtis Gassert, Director of the OUCC's Sewer/Water/Rates Division, testified for the Public. In his testimony in Cause No. 42029, which he incorporated into his testimony in this Cause, Mr. Gassert explained that he considered the acquisition premium to be "imputed" because the transaction was accounted for as a pooling of interest. Mr. Gassert asserted that under this method of accounting for acquisitions no acquisition premium is recorded. Rather, the assets and liabilities of the acquired company are simply added to the books of the acquiring company. Therefore, he asserted, there is no acquisition premium for the utility to recover. Mr. Gassert stated that the utility should not be allowed to recover something that does not exist. Mr. Gassert further testified in Cause No. 42029 as follows:

> Mr. Gassert noted that the negative impacts of allowing Indiana-American to recover an acquisition premium that does not exist could be staggering. He noted the then recent announcement that RWE offered to acquire American Water Works for $4.6 billion. Also, he noted that AES completed its purchase of IPALCO. According to Mr. Gassert, if it becomes acceptable for these purchase prices to be allocated to their regulated utility subsidiaries and imputed or pushed down as indicators of fair value to the utilities, Indiana ratepayers will be required to pay millions of additional dollars just because their utility's parent company was acquired.

Mr. Gassert added that a similar request was made in Cause No. 41661 where Harbour Water requested to earn a return on an acquisition premium that was "pushed down" from its parent company. Mr. Gassert noted that the Commission did not allow Harbour Water to earn a return on that "pushed down" or imputed acquisition premium.

Mr. Gassert also asserted that the purchase price imputed to the Northwest acquisition was not representative of the fair value of Northwest's assets for several reasons. First, Mr. Gassert cited evidence indicating that substantial goodwill or going concern was included in the purchase price. Mr. Gassert defined goodwill as the excess of the purchase price paid to acquire a business over the market value of the assets acquired. He further noted that goodwill is different than other assets because goodwill can only be identified with the business as a going concern. For this reason, goodwill is sometimes referred to as "going value" or "going concern value." Mr. Gassert cited examples of goodwill which included brand values; market share; monopoly conditions; superior earnings potential; strategic location; access to natural resources; governmentally-conferred privileges, such as franchises and grants; and other strategic benefits and competitive advantages.

Mr. Gassert stated that the Commission must exclude from fair value any amounts for goodwill and going value according to Ind. Code § 8-1-2-6. He further stated that any valuation

performed on a utility's assets must include going concern because such an evaluation presupposes attached customers, a given demand for service, appropriate business organization and management, and, thus, earning power. If the properties were not actually a going concern and were not regarded as such, their market value would be much less than reproduction cost less depreciation. Practically all the plant and equipment would have very little resale value. Essentially, the utility's plant is worth very little without customers. Thus, he asserted, the going value of a business is an essential element in the proper valuation of a public utility. To support his contention, Mr. Gassert noted the following discussion by the Supreme Court of Wisconsin:

> In the proper valuation of a public utility for condemnation or sale purposes certain main elements usually present in every case may legitimately be considered. These are the present value of its physical property; the present and prospective reasonable earnings of its business; the going value thereof; and the amount of money presently needed to put the plant in good condition. There may be other elements, but these are generally the essential ones....<u>The going value of a utility is that part of its value due to its having an existing established business.</u>

Oshkosh Waterworks Co. v. R.R. Comm'n, 161 Wis. 122, 127, 152 N.W. 859, 861-862 (1915) (emphasis added). Mr. Gassert concluded that it is inherent that the purchase price already includes some amount of going value and cannot be relied upon to set the fair value.

Second, Mr. Gassert also noted the poor condition of the intake tunnel which required significant investment that will be more than $58 million in the first three (3) years following the acquisition. Mr. Gassert noted that when the $48.752 million purchase price is combined with the $58 million of additional investments, Indiana-American will have spent $106.752 million for a utility that had a book value of $27.280 million when acquired. Mr. Gassert asserted the premium Petitioner paid does not reflect a utility that required such substantial additional investments. Mr. Gassert concluded that such a premium for a utility requiring substantial investment indicates the purchase of something other than the tangible assets and, therefore, should be excluded from rate base.

Mr. Gassert stated that the amount of needed investment in an acquired utility should reduce the amount paid to acquire that utility. In Cause No. 40103, Mr. George Johnstone, President and CEO of American, made the following statement:

> In fact, I can think of examples where you would buy a utility at lower prices than book value, and the reason that you would end up getting that price acceptable is the investment needed to bring the facilities up to the level they need to be at."

See Ind.-Am. Co., Inc., Cause No. 40103, 169 PUR4th 252 (Indiana Utility Regulatory Commission, Date Issued May 30, 1996), Tr. p. GWJ-37, line 24.

Mr. Gassert testified that goodwill and required investment were not the only reasons to indicate that the purchase price of Northwest could not be relied on to determine the fair value of Northwest's tangible assets. Third, when the NEI purchase price was allocated between the non-regulated and regulated utilities, the Company allocated an excessive amount to the regulated utilities. Mr. Gassert asserted that this could be determined by reviewing the Merrill Lynch

valuation information provided on page 8 of Mr. Hartnett's testimony in Cause No. 42029. Mr. Gassert reproduced Mr. Hartnett's data below:

	Low (Millions)	High (Millions)
Water Companies	$ 346.8 or 82.1%	$ 436.8 or 82.7%
Securities Held at Market	62.7	78.6
Other Holdings	12.9	12.9
Total	$ 422.4	$ 528.3

From reviewing the Merrill Lynch data above, the water company values range from 82.1% to 82.7% of the total NEI holdings. But, as Mr. Gassert noted, the amount actually allocated to the regulated water companies was 87%. This amount was calculated by dividing the $415 million allocated to the water companies by the total $475 million NEI purchase price. Mr. Gassert further observed that, if the average of the low and high valuations are used, then the purchase price allocated to the regulated water utilities would be $391.4 million ($475 million x 82.4%). Mr. Gassert explained this would result in an over-allocation of $23.6 million ($415 million - $391.4 million) to the regulated water utilities.

Mr. Gassert explained that a portion of the over-allocation can be attributed to the improper allocation of income taxes that would result from the sale of nonutility assets to the regulated water utilities. As explained on page 11 of Mr. Hartnett's testimony, a "valuation adjustment" was applied to the values of the nonutility assets to reflect the taxes that would be paid when these stocks were sold. After these adjustments were made, the net values of the nonutility assets were subtracted from the total purchase price to determine the purchase price for the water utilities.

Mr. Gassert posited that the impact of the "valuation adjustment" is to allocate income taxes from the sale of nonutility stocks to the purchase price of the regulated water utilities which is clearly improper. He stated the income taxes that will be paid when the nonutility stocks are sold add no value whatsoever to the regulated water utilities and these income taxes should not be added to the purchase price of the utility stocks.

Mr. Gassert compared the allocated purchase prices to the Merrill Lynch valuation analysis and determined that the $475 million total price paid for NEI falls directly in the middle of the valuation range of $422.4 million to $528.3 million. However, the $415 million price allocated to the water companies falls on the high side of the valuation range of $346.8 to $436.8 million. The $391.4 million calculation Mr. Gassert performed above falls directly in the middle of the valuation range for the water companies and provides additional assurance that an unreasonable amount was allocated to the water companies.

In addition to the foregoing, Mr. Gassert expressed another concern about the amount allocated to the Northwest purchase price. Mr. Gassert noted that the NEI purchase price was allocated based on book equity and net income as of September 30, 1998. Mr. Gassert stated that allocating the purchase price in this manner does not represent the true value of the acquired utilities that an independent valuation might generate. For instance, this method of allocation does not consider the condition of the assets when acquired. As previously stated, Indiana-

American will have invested $58 million in Northwest since its acquisition. The poor condition of its intake tunnel assets should have been reflected in the purchase price allocated to Northwest but was not because the NEI purchase price was allocated based on book equity and net income.

In his testimony prepared for this Cause, Mr. Gassert noted that in an effort to seek approval of Indiana-American's acquisition adjustment for the Northwest Acquisition, Mr. Eckart discussed at length the benefits of Indiana-American expanding its "footprint" and how its acquisitions of Northwest and United created new hubs that provide the potential to help small and troubled water utilities not previously within Indiana-American's reach. Mr. Gassert disagreed that the acquisition of Northwest and United created new hubs to help small and troubled water utilities. While Mr. Gassert agreed that the acquisition of those existing hubs may have assisted Indiana-American in acquiring certain small and troubled utilities not previously in its reach, those hubs for acquiring small and troubled utilities preexisted their acquisition by Indiana-American. (*See Public's Exhibit 5*, pp. 29-30.) Mr. Gassert suggests that Mr. Eckart's analysis fails to acknowledge the contributions Northwest could and did make in acquiring small or troubled systems. According to Mr. Gassert, Mr. Eckart's argument rests on the false premise that only Indiana-American could have and would have acquired the small utilities it merged into the Northwest operation.

Mr. Gassert noted that well before Indiana-American acquired Northwest, which had 65,000 customers and was owned by a parent that owned four (4) water utilities, Northwest was an existing hub that possessed the technical, financial and managerial ability to acquire small and troubled utilities and exercised that ability before it was acquired by Petitioner's parent. Mr. Gassert noted that Northwest was both willing and able to acquire smaller systems to create a larger regional water utility. Mr. Gassert stated that its growing regionalism was one of the factors that caused Northwest to change its name from the Gary-Hobart Water Company to the Northwest Indiana Water Company in 1994.

By way of example of Northwest's willingness and ability to acquire smaller systems, Mr. Gassert stated that before it was acquired, Northwest acquired Shorewood Forest Utilities, Inc.; People's Water Co.; Independence Hill Third Addition Water Works, Inc.; water utility properties of Utility Services Corp.; the water distribution system of Chesterton; and the water distribution system of Burns Harbor. These six (6) acquisitions were all completed within the ten (10) years prior to Indiana-American's acquisition of Northwest and without any effort on the part of Northwest to seek acquisition adjustments. Mr. Gassert also described the willingness of many water utilities in Indiana to acquire small and troubled water utilities specifically listing such municipal utilities as Bloomington, Elkhart, Merrillville Conservancy District and the Cities of Woodburn and Whitestown.

Mr. Gassert concluded that he cannot see that Indiana-American's acquisition of Northwest and United made possible future acquisitions of small and troubled utilities that were not previously feasible. Mr. Gassert reiterated that Northwest was very active with the acquisition of small systems and there is no reason to believe that the practice would not have continued without Petitioner's ownership. Therefore, Mr. Gassert did not believe Indiana-American's hub and spoke system justifies the recovery of the Northwest acquisition adjustment, which was denied in the last case and which it again seeks.

Further, Mr. Gassert expressed concern that Petitioner's request appears to be an effort to replace the Commission's long standing "troubled" utility standard with a new less stringent standard. However, he added that even if the troubled utility standard were to be replaced with a standard that reviews whether the acquisition makes possible future acquisitions of small and troubled utilities that were not previously feasible, Petitioner would fail that standard since it was already feasible for Northwest to make acquisitions of small and troubled utilities before being acquired by Indiana-American. (*Public's Exhibit 5*, p. 27, lines 5-13.)

With respect to Petitioner's hub and spoke concept, Mr. Gassert agreed that it is better to have larger more regionalized water utilities rather than tens of thousands of smaller systems. But he disagreed with the benefit, as described by Petitioner as it relates to the Northwest acquisition, that it has created something where nothing previously existed and should get credit for its creation. Indiana-American did not create Northwest Indiana Water. Indiana-American was the successful acquirer of an existing hub. Further, Northwest did not become a hub to acquire small and troubled systems only after its acquisition by Petitioner's parent. Northwest had established a record of such transactions before being acquired. Mr. Gassert concluded that the Commission should not provide favorable ratemaking treatment for the Northwest acquisition based on Petitioner's hub and spoke argument.

Addressing Petitioner's claim of savings resulting from the Northwest acquisition, Mr. Gassert stated that Mr. Brownell's asserted annual savings of $2,789,494 overstates the annual savings and understates the annual revenue requirement. Mr. Gassert explained that Mr. Brownell failed to include the management fee expense category. Referring to page 9 of the Commission's order in Cause No. 42029, Mr. Gassert noted that Petitioner's witness calculated savings in this category of $302,224, while the OUCC's witness calculated increased costs of $639,256. Relying on the data reported on OUCC Utility Analyst Judith Gemmecke's Schedule JIG-11, page 4 of 6 submitted in Cause No. 42029, Mr. Gassert calculated Northwest's portion of the management fee to be $304,930. Mr. Gassert asserted that the annual savings corrected for the omitted management fees would be $2,413,533 ($2,718,463 - $304,930).

During his questioning at the Evidentiary Hearing, Mr. Gassert noted that Mr. Brownell, in his rebuttal testimony, disputed the management fee figure used by Mr. Gassert. Mr. Gassert testified that he performed an analysis assuming the savings Mr. Brownell said should apply. Mr. Gassert explained that Mr. Brownell suggested that the number Mr. Gassert used to calculate management fees for Northwest was incorrect, and so he inserted the number that Mr. Brownell indicated was the correct number to use. Mr. Gassert noted that, even using the number which Mr. Brownell provided, he still determined there were no savings.

Discussing how Mr. Brownell understated the revenue requirement related to the Northwest acquisition, Mr. Gassert noted that Mr. Brownell failed to include the annual amortization of $536,800 as a component of the revenue requirement. Both Mr. Eckart and Mr. Brownell have requested to recover the annual amortization through rates if the net acquisition adjustment is used to determine the NOI as previously discussed.

Mr. Gassert noted that the first year revenue requirement, corrected for the annual amortization, is $3,201,074 and calculated on Attachment ECG-4 of his testimony. (*Public's Exhibit 5, Attach. ECG-4,* pp. 1-2.) Mr. Gassert compared his results to Mr. Brownell's by

summarizing his results in the same format as found on Mr. Brownell's exhibit. (*See Petitioner's Exhibit WWB-5.*) The OUCC's results indicate Petitioner's costs exceed the anticipated savings by a substantial amount in each of the first seven (7) years. The amount that cost exceeds savings is represented by the positive numbers. The negative numbers in Petitioner's Exhibit represent claimed savings over costs.

OUCC results:

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Revenue Rqmt.	$ 3,201,074	$ 3,143,461	$ 3,085,849	$ 3,028,237	$ 2,970,625	$ 2,913,012	$ 2,855,400
Cost Savings	2,484,564	2,484,564	2,484,564	2,484,564	2,484,564	2,484,564	2,484,564
Costs over (Savings)	$ 716,510	$ 658,897	$ 601,285	$ 543,673	$ 486,061	$ 428,448	$ 370,836

Results from Petitioner's Exhibit WWB-5:

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Revenue Rqmt.	$ 2,809,023	$ 2,773,911	$ 2,703,684	$ 2,633,459	$ 2,563,234	$ 2,493,007	$ 2,422,782
Cost Savings	2,789,494	2,789,494	2,789,494	2,789,494	2,789,494	2,789,494	2,789,494
Costs over (Savings)	$ 19,529	$ (15,583)	$ (85,810)	$ (156,035)	$ (226,260)	$ (296,487)	$ (366,712)

Mr. Gassert disagreed with the following testimony presented by Mr. Brownell:

> Q. Are you saying that the customers will actually pay less for water service as a result of the merger of these companies even with Indiana-American's proposed ratemaking treatment?
>
> A. Yes. The customers pay less for water service than they would have if the merger had not taken place because they get the benefit of 100% of the savings. Indiana-American will receive a return on the amount paid to make the savings possible but it is disadvantaged compared to the customers if it is only allowed a return on the acquisition adjustment net of accumulated amortization but is not allowed to recover the amortized amount as an expense.

Petitioner's Exhibit WWB, p. 17.

Mr. Gassert disagreed that the ratepayers will receive 100% of the savings under Petitioner's proposed ratemaking treatment as stated by Mr. Brownell. He explained that the only way the ratepayers could receive the benefit of 100% of the claimed savings would be for the utility to not recover any portion of the acquisition adjustment in rates. Even if actual savings were equal to costs (which Mr. Gassert asserted he has demonstrated is not the case), the ratepayers would not benefit but only break even. Mr. Gassert concluded that the entirety of the savings claimed by Petitioner is offset by the costs of the acquisition adjustment.

Mr. Gassert had other concerns regarding Petitioner's proposal to recover the Northwest acquisition adjustment in rates. He added that, as can be seen from reviewing Petitioner's Exhibit JLC-1-U, Schedule 1, all ratepayers across Petitioner's operations have been allocated a

portion of the acquisition adjustment. The Northwest district itself has been allocated 28.7% of the fair value increment. Therefore, under Petitioner's proposal, ratepayers in the Southern Indiana operation will pay higher rates so that Northwest's ratepayers will pay, what Petitioner claims to be, lower operation and maintenance ("O&M") costs. Mr. Gassert concluded that unfortunately, everyone will pay more with the inclusion of the Northwest acquisition adjustment in rates.

In addition to the difficulty with proving and verifying merger savings and uncertainty about whether the savings can even remain over a forty (40) year period of time, Mr. Gassert identified another issue that he claimed needs to be considered when reviewing merger savings. Mr. Gassert believes the Commission should consider whether the savings are achievable only because of the merger. Mr. Gassert noted that in Cause No. 40103, the Commission stated:

> Additionally, we perceive that some cost savings are the natural result of a sensible consolidation of utility systems, which would appear to undermine Petitioner's claim of its responsibility for the generation of significant savings through management effort. We do not believe such natural synergies are the type of substantial savings and benefits sufficient to invoke an exception from the general propensity of the traditional standard to disallow favorable treatment of an acquisition adjustment.

In.-Amer. Water Co., Inc., Cause No. 40103, p. 7.

Mr. Gassert asserted that a significant portion of the claimed savings could have been achieved without the merger. The largest single component of the $2,789,494 claimed savings relates to labor expense. The claimed labor expense savings is $2,357,003. Mr. Gassert noted that a list of eliminated positions was provided on page 19 of Mr. Cole's testimony in Cause No. 42029. That list reveals that fifty-five (55) positions were eliminated. Of those fifty-five (55) positions, twenty (20) can easily be identified as the type of positions that could have been eliminated through centralization. Those twenty (20) positions are broken down as follows: four (4) engineering, five (5) accounting and eleven (11) customer service.

Mr. Gassert believed much of this reduction could have been completed through centralization because Northwest Indiana Water Co. was owned by Continental Water Company (which was owned by NEI). Continental owned four (4) subsidiaries that were engaged in the provision of water utility service in Indiana, Illinois, Missouri and New York. The twenty (20) positions discussed above relate to functions that could have been centralized by Continental to gain these efficiencies. In support of this notion, Mr. Gassert noted that the engineering, accounting and customer service functions have been centralized by Indiana-American.

Mr. Gassert also questioned the accuracy of the merger savings calculation. As stated in Cause No. 40103, estimates of cost savings by utilities have always been hotly disputed because the calculation of the actual savings is very nebulous, subjective and difficult to quantify. The difficulty with proving and verifying merger savings and costs lies in the difficulty of identifying and quantifying these savings and costs. Obviously, according to Mr. Gassert, utilities have an incentive to identify and quantify as much merger-related savings as possible while ignoring or minimizing costs. The OUCC asserted that testimony in this case reveals that Indiana-American

is a very large, complex organization made more so by the interaction of its operations with other American subsidiaries.

Next, Mr. Gassert provided testimony of examples where he believed Indiana-American's previous merger savings calculations overstated the benefits to the ratepayers. For instance, in Cause No. 40103, Indiana-American applied a 3.75% growth rate to the O&M savings it calculated. Thus, it increased the anticipated savings every year for forty (40) years by 3.75%. However, in Cause No. 42029, Petitioner used a 3.0% growth rate. According to Mr. Gassert, the effect of using a 3.75% growth rate in Cause No. 40103 rather than a 3.0% growth rate caused Petitioner to overstate its O&M savings over forty (40) years by more than $34 million as calculated in Public's Exhibit 5, Attachment ECG-5. Mr. Gassert also asserted that in Cause Nos. 40103 and 42029 Petitioner used a tax gross-up factor that did not reflect new higher state taxes. In Cause No. 42029, Petitioner used a tax gross-up factor 1.6435. Due to changes in the tax laws, the tax gross-up factor in this Cause has increased to 1.7239. Petitioner, however, has continued to use the tax gross-up factor of 1.6435. Mr. Gassert testified that this has caused Mr. Brownell to understate the revenue requirement on Petitioner's Exhibit WWB-6 in every year for forty (40) years. In the first year, for example, Mr. Brownell calculated the required gross-up to be $1,099,852 ($1,709,171 x .6435). However, the actual required gross-up is $1,237,269 ($1,709,171 x .7239), and the amount should be reflected in Petitioner's rate schedules. Thus, in the first year, Mr. Brownell understated the acquisition adjustment revenue requirement by $137,417 ($1,237,269 - $1,099,852). Mr. Gassert concluded from his testimony that it is apparent that Petitioner has not been successful at estimating savings from its previous mergers over very short periods of time let alone over forty (40) years, and that Indiana-American's proposal would place the risk of overestimated savings on its ratepayers

Intervenors' Positions. Intervenor Industrial Group's witness Michael P. Gorman, a consultant for the firm of Brubaker and Associates, Inc., disputed the recovery of the Northwest acquisition adjustment. According to Mr. Gorman, Petitioner did not reflect all of its labor and benefit costs for the Northwest district because the management fees from American Water Works Service Company ("AWWSC") have increased as a result of the Northwest acquisition. Mr. Gorman testified that Petitioner's examples of labor cost savings are entirely or largely offset by increased management fees. (*Industrial Group Exhibit 1*, p. 32.) In his opinion, Petitioner had not shown that the net savings of the acquisition offsets the acquisition adjustment revenue requirement.

Intervenor Schererville's witness Theodore J. Sommer, a member of the firm of London Witte Group, LLC, provided testimony that the savings did not include an allocation of the corporate costs, which should have been included in such savings calculations. Witness Sommer referred to our order in Cause No. 42029 to support his conclusions. (*Intervenor Schererville Exhibit 1*, p. 12, line 17 through p. 13, line 14.)

Petitioner's Rebuttal. In rebuttal, Mr. Eckart stated that he believed Mr. Gassert has taken the hub and spoke concept out of context. Mr. Eckart said he did not contend Petitioner is the only utility that can resolve small troubled utility problems, but did believe Petitioner, through its size, can accomplish this on a larger basis. For example, when the OUCC asked Petitioner to help at Farmington and Prairieton, Petitioner was able to step in because it owned adjacent operations (hubs) at Muncie and Terre Haute. Mr. Eckart also said it is not merely a

order in that Cause, we found that ratepayer benefits did not exceed the costs of the acquisition

premium requested. In Cause No. 42029, Petitioner also asked us to reconsider our decision on the Northwest acquisition adjustment in its Petition for Rehearing and Reconsideration, which we denied. In this case, Petitioner asks us again to consider an acquisition adjustment for Northwest based on its "hub and spoke" concept and reiterated its position about capital and O&M savings. First, we will discuss the hub and spoke concept.

Mr. Eckart testified that the acquisitions of Northwest and United are directly related to solving the problem of small and troubled water utilities because they added many new operating centers (hubs) from which extensions can be made (spokes) to reach small and troubled systems within a reasonable radius. Petitioner suggested that due to the significance of the hub and spoke concept that the issue is not whether Northwest was a troubled utility but whether that acquisition made possible future acquisitions of small and troubled utilities that would not be feasible without the Northwest acquisition. (*Petitioner's Exhibit JEE*, p. 33) We are not convinced. First, there is no new evidence nor was any evidence presented in the last case to indicate Northwest was a troubled utility. Second, we do not agree that the acquisition of Northwest was the cause of the benefits claimed by Indiana-American. It is true that Indiana-American has acquired smaller utilities and integrated them into the Northwest operation. However, we disagree that this acquisition created a new "hub." The evidence presented by the OUCC clearly indicates that Northwest was very active in the consolidation of smaller utilities well before being acquired by Indiana-American. Not only did Northwest display a willingness to step forward, but in the six (6) most recent acquisitions, Northwest did not seek to recover an acquisition adjustment related to those acquisitions. Given the fact that Northwest was a large water utility provider that possessed the technical, financial and managerial ability to acquire small and troubled utilities and frequently utilized that ability before it was acquired by Petitioner, we cannot attribute credit to Indiana-American for creating a new hub to provide this benefit when it is clear that the benefit already existed. Therefore, the answer to the question Petitioner suggests, as to whether the Northwest acquisition made possible future acquisitions of small and troubled utilities that would not be feasible without the acquisition, is no. Thus, we are not convinced that the "hub and spoke" concept discussed by Indiana-American warrants any favorable consideration in our determination about whether the imputed Northwest acquisition adjustment should be included in rates.

Next, we will address the savings Petitioner has reiterated in this case that relate to the Northwest acquisition. Petitioner suggests that we did not consider the Northwest acquisition separately in the last rate case because Petitioner aggregated several acquisitions into one analysis. We do not agree. Before we began our discussion about the Northwest acquisition in our final order in Cause No. 42029, we stated that:

> It is the established policy of this Commission to evaluate acquisitions on a case-by-case basis. <u>In the case of merged operational and management services, they will be separated for purposes of rate consideration insofar as possible.</u> A case-by-case analysis will prevent the benefits, if any, from one transaction being conveyed to another transaction and ensure that each acquisition is measured on its own merits.

Ind.-Am. Water Co., Cause No. 42029, 5 (emphasis added). Therefore, it is evident that we did, insofar as possible, consider the Northwest acquisition request independently in Cause No. 42029.

Once again, there appears to be a significant amount of disagreement and controversy over the savings calculation. We note that the average of the seven (7) years of net savings calculated by Mr. Brownell is only $161,051. Even if this amount is correct, when one considers the amount of costs and savings in question, and the controversy surrounding these amounts, this is not a material amount to warrant passing such a significant cost on to the ratepayers. Also, Mr. Brownell calculated total annual savings of $2,789,494 in his calculation of net savings, which is significantly higher than the savings calculated by the OUCC in Cause No. 42029. In that Cause, Mr. Gassert calculated annual O&M savings of $1,375,762. Given the controversy and uncertainty about what level of savings have been achieved, the amount of savings calculated by Petitioner does not provide us with the level of assurance we need to pass on the costs when it is not evident that any net savings will be achieved. We note that the standard we have used to consider acquisition adjustments requires significant and demonstrable savings. Based on the evidence of record here, we cannot conclude with certainty that any savings will be generated if favorable ratemaking treatment is granted. Petitioner's reliance on at best marginal estimated savings to impose a ratepayer funded acquisition adjustment puts the risk that such savings may not occur on the ratepayers. We also note that American is in the process of consolidating its operations in ways that have increased the cost to Indiana-American. Savings projected out several decades under such circumstances are simply not assured.

We also note certain testimony presented by the OUCC in Cause No. 42029 which was included as Public's Exhibit 5, Attachment ECG-1 in this Cause. We believe some of the more important points to consider about the Northwest acquisition adjustment request from that testimony are as follows:

First, the acquisition adjustment does not exist and is not recorded on Indiana-American's books. The acquisition adjustment was created by Petitioner for ratemaking purposes.

Second, income taxes resulting from the sale of NEI's telephone companies were included in the calculated purchase price.

Third, the imputed purchase price was based on book equity and net income. This method of allocation does not consider the condition of the assets when acquired, such as the intake tunnel that cost $50 million to replace. The flaws resulted in an over-allocation of the purchase price for the Northwest acquisition.

Fourth, no consideration has been made by Petitioner to account for the fact that going concern value might properly be considered included in the allocated purchase price and therefore cannot reasonably be relied on to set the fair value.

We believe these points provide additional concerns that support our disallowance of Petitioner's request for favorable rate treatment related to Petitioner's Northwest acquisition adjustment.

Based on our previous review and findings in Cause No. 42029, our finding that Petitioner's hub and spoke concept does not warrant favorable ratemaking treatment, the questionable savings, the material impact to ratepayers, as well as the concerns raised by the OUCC in testimony filed in Cause No. 42029 that have been incorporated into this Cause, we continue to find that ratepayer benefits do not exceed the costs of the acquisition premium requested. Accordingly, and once again, we deny Petitioner's request for favorable ratemaking treatment with respect to its Northwest acquisition.

Because we have denied Petitioner's request to recover an acquisition adjustment related to Northwest Indiana Water, it is not necessary to discuss whether a return should be granted on the original unamortized balance of the imputed acquisition adjustment, the net amortized balance, or whether the annual amortization should be included in rates.

2. Indiana Cities Acquisition Adjustment

The Commission has dealt with the treatment of the purchase price paid by Petitioner to acquire Indiana Cities Water Corporation in three (3) prior litigated rate cases. The first time was in Cause No. 40103, resulting in the 1996 Rate Order. The Commission again considered this issue in the 1997 Rate Order and in the 2002 Rate Order.

Petitioner's total investment to acquire Indiana Cities was $37,072,008. (*1996 Rate Order*, Cause No. 40103, p. 3.) The book value of Indiana Cities' common equity at the acquisition date was $19,659,999. (*Id.*) The $17,412,009 difference between the acquisition cost and the book value was recorded on Indiana-American's balance sheet as an acquisition adjustment. (*Id.*) For accounting purposes, Indiana-American is amortizing the Indiana Cities' acquisition adjustment over a period of forty (40) years.[2] (*1997 Rate Order*, Cause No. 40703, p. 4.) The annual expense relating to this amortization is $467,436. (*Petitioner's Exhibit JEE*, p. 20, line 12; *Public's Exhibit 5*, p. 4.)

Two issues in Cause No. 40103 were (a) whether Petitioner should be allowed to earn a return on the amount of the investment made to acquire Indiana Cities by including the acquisition adjustment in Indiana-American's rate base upon which Petitioner is allowed to earn a return and (b) whether Petitioner should be allowed to recover its investment gradually over time by including the annual amortization of the acquisition adjustment as an allowable expense for ratemaking purposes. Petitioner proposed that the acquisition adjustment be included in its original cost rate base and that the annual amortization expense be reflected "above-the-line" for ratemaking purposes. Petitioner contended that the Indiana Cities acquisition adjustment satisfied the Commission's criteria for favorable ratemaking treatment because the purchase price was reasonable, negotiated at arms length and resulted in substantial cost savings and other benefits.

The Commission did not accept Petitioner's proposed original cost rate base treatment. Instead, it gave "Petitioner authority to recognize 100% of its investment in rates through its fair

[2] The amortization accrued from the time of the acquisition to the issuance of the 1996 Rate Order was deferred so the effective amortization period is 37.25 years, *i.e.*, forty (40) years less the period between the acquisition and the 1996 Rate Order. This is why the amortization expense is $467,436 per year, rather than the amount of $435,300 calculated by Mr. Gassert. (*Public's Exhibit 5*, p. 5, n. 1.)

value rate base," but found none of the annual amortization expense should be treated as a recoverable expense. (*1996 Rate Order*, Cause No. 40103, p. 15.) The Commission stated: "Petitioner can and should be compensated for its investment in the Indiana Cities properties through informed fair value ratemaking by fully recognizing their fair value in [the Commission's] fair value rate base determination." (*Id.* at p. 49.) The Commission explained that it was not allowing above-the-line recognition for the amortization expense because it analogized fair value treatment to an investment in stocks or bonds wherein the investor earns a return on the investment in the form of dividends or interest but does not recover the principal until the end of the investor's holding period. (*Id.* at p. 10.)

In the 1996 Rate Order, the Commission approved a fair value NOI increment of $1,112,482, *i.e.*, the amount the authorized return exceeded the product of the Commission-determined cost of capital and the original cost rate base that did not include the Indiana Cities' acquisition adjustment. (*Petitioner's Exhibit JEE*, p. 14.) The Commission also used an interest synchronization method to determine the interest expense deducted in the income tax calculation by multiplying the weighted cost of debt by the original cost rate base (from which the Indiana Cities' acquisition adjustment was excluded). (*Id.* at pp. 14-15.) The effect of this methodology essentially is to allocate to the shareholder the benefit of the tax deduction for the interest on the debt used to finance the acquisition adjustment. (*Id.*)

In the 1997 Rate Order, the Commission confirmed its position that Petitioner should be compensated for its investment in Indiana Cities through fair value ratemaking. The Commission stated:

> In [Cause No. 40103], Indiana-American submitted extensive evidence regarding the cost savings from the combination of Indiana-American and Indiana Cities, showing that the savings were greatly in excess of the cost of the capital invested in order to make those savings possible. Under informed fair value ratemaking, Indiana-American will be compensated for that investment by recognition of the full amount of the purchase price in the fair value rate base. Indiana-American continues to incur the capital costs associated with the debt and equity funds used to acquire Indiana Cities. We must also continue to grant a fair value return increment which provides that compensation, an issue we shall discuss in more detail later.

Ind.-Am. Water Co., Cause No. 40703, p. 30. The Commission also found that, due to the savings generated by the acquisition adjustment, recognition of the Indiana Cities' acquisition adjustment should be treated as a "reasonable cost of bringing the property to its then state of efficiency" includible in Petitioner's fair value rate base pursuant to Ind. Code § 8-1-2-6(a). The Commission also stated that "Petitioner would be allowed for ratemaking purposes a return on the acquisition adjustment but not a return of the acquisition adjustment." (*Id.* at p. 40.)

In the 1997 Rate Order, the Commission found a fair value NOI increment of $1,340,279 above what would result from multiplying the cost of capital determination by the original cost rate base excluding the Indiana Cities acquisition adjustment. (*Id.* at p. 46; *Petitioner's Exhibit JEE*, p. 17.) The Commission also reaffirmed use of the interest synchronization method used in the 1996 Rate Order. (*1997 Rate Order*, Cause No. 40703, p. 64.)

The 2002 Rate Order included a fair value increment of $1,282,693 and used the same interest synchronization method as in the prior two (2) orders. (*Petitioner's Exhibit JEE*, p. 19.) In Cause No. 40703, Petitioner and the OUCC disagreed about whether the fair value should be based on the full amount of the Indiana Cities' acquisition adjustment ("gross amount") or the amount net of the accumulated amortization as of the rate base valuation date ("net amount"). Petitioner contended that the findings in the 1996 Rate Order and 1997 Rate Order supported use of the gross amount. Petitioner also asserted that only the gross amount was consistent with the stock and bond analogy adopted by the Commission and its finding about the non-recoverability of the amortization. The OUCC argued that the net amount should be used because it reflects diminishing value over time. In the 2002 Rate Order, the Commission stated that it "agree[d] with the OUCC analysis of this issue." (*2002 Rate Order,* Cause No. 42029, p. 13.)

Petitioner's Position. Petitioner computed a proposed fair value increment for the Indiana Cities' acquisition adjustment by applying its proposed cost of capital to the net amount. (*Petitioner's Exhibit JLC*, p. 10; *Petitioner's Exhibit JLC-1, Sched. 4.*) Petitioner's witness Eckart testified that Petitioner followed the treatment adopted by the Commission in the 2002 Rate Order. Mr. Eckart stated, however, that if the net amount were used, the Commission should allow Petitioner to recover the annual amortization amount as an above-the-line expense. (*Petitioner's Exhibit JEE*, p. 20.) Mr. Eckart also testified that if the fair value increment were calculated on the gross amount, it would be about $280,000 greater. (*Id.*)

OUCC's Position. Mr. Gassert noted that the amortization of the Indiana Cities acquisition adjustment had been discussed and denied by the Commission in Cause No. 40103. Mr. Gassert also noted that despite the denial in Cause No. 40103, Indiana-American was allowed to receive compensation for a portion of the annual amortization in Cause No. 40703. Mr. Eckart acknowledged this on page 18 of his testimony in response to the following quote from our 1997 Rate Order:

> We have not allowed Petitioner to amortize the acquisition adjustment as an above-the-line expense. Moreover, the 1993 acquisition adjustment is included in the fair value rate base but not the original cost rate base to which interest synchronization applies. Therefore, the acquisition adjustment should not be included in the interest synchronization calculation.

Ind-Am. Water Co., Cause No. 40703, at p.120. In response to this quote, Mr. Eckert stated that "[t]his methodology served to offset some of the effect of disallowing any recovery of the annual amortization expense." (*Petitioner's Exhibit JEE*, p. 18, lines 19-20; *Public's Exhibit 5*, p. 39, lines 10-14.) Mr. Gassert concluded, therefore, that in addition to receiving a return on the Indiana Cities' acquisition adjustment, Petitioner has been receiving a good portion of the annual amortization.

Intervenor's Position. Intervenor Industrial Group's witness Michael Gorman, disagreed with Mr. Eckert that the Commission's 2002 Rate Order on the treatment of acquisition expense was inconsistent with the Commission's 1996 and 1997 Orders. Mr. Gorman stated that fair value of an acquisition adjustment will decline over time just as the fair value of the assets that were originally acquired. Consequently, according to Mr. Gorman, reflecting the acquisition adjustment net of accumulated amortization is not inconsistent. Rather, according to Mr.

Gorman, it is necessary in order to state the acquisition adjustment at its test year fair value. (*Industrial Group Exhibit 1*, pp. 33-34.) According to Mr. Gorman, the fair value of an asset declines over time as its remaining life is shortened. He noted that the on-going value of the acquisition is maintained by reinvesting in the utility, but the reinvestment is not tied to the original acquisition premium that Petitioner paid to acquire the companies. (*Id.* at p.35.) Mr. Gorman opined that the fair value of an acquisition adjustment would be overstated if the adjustment is not reduced over time. (*Id.*) Mr. Gorman also testified that the Commission's interest synchronization methodology provides additional revenues to Petitioner by allowing it to earn a full return on the acquisition adjustment grossed up by the tax factor. (*Id.* at pp. 35-36.) In Mr. Gorman's opinion, if the Commission allows Petitioner to amortize above-the-line, then the interest synchronization methodology should be modified to include the debt component relating to the acquisition adjustment. (*Id.* at p. 36.)

Petitioner's Rebuttal In rebuttal, Petitioner's witness Eckart testified that although Petitioner's filing in this Cause followed its interpretation of the 2002 Rate Order, Petitioner believed the use of an amortized approach was inconsistent with prior Commission Orders. (*Petitioner's Exhibit JEE-R*, p. 20-21.) He described the statement in the 2002 Rate Order that the Commission agreed with the OUCC's analysis of this issue as a change from the prior two (2) rate orders. (*Id.* at p. 26.) Mr. Eckart further said that "[c]larification and consistency is needed in order for the Company to make good business decisions and have those decisions result in quality service for the citizens in Indiana." (*Id.* at p. 27.)

Commission Discussion and Findings. In testifying for the OUCC in Cause No. 42029, witness Gassert effectively responded to Petitioner's continued request to earn a return on the unamortized balance of the Indiana-Cities acquisition adjustment. (*See Public's Exhibit 5, Attach. ECG-1.*) Mr. Gassert stated, "In Cause No. 40103, Petitioner requested to collect $72,475,271 over a forty-year period. Without the two changes I discuss, Petitioner would collect $109,593,692 for that same time period. Thus, Petitioner will collect an additional $37,118,421 or 51% more in revenues than it originally requested." (*Id.* at p.28, lines 5-9.) Also during that testimony, Mr. Gassert discussed the Commission's findings in Cause No. 40103. He declared that:

> Clearly, the $1,112,482 fair value increment provided by the Commission is less than the $1,485,244 calculated using Petitioner's interpretation of Cause No. 40103. Therefore, it is clear that the Commission was providing a return on something less than the unamortized $17,412,009 acquisition premium and was possibly using the amortized amount.

Id. at p. 29, lines 17-22.

We conclude that our previous Orders are not inconsistent. Petitioner has never been given a return on its unamortized acquisition adjustment. Further, our position to disallow Petitioner the annual amortization is consistent with our previous Orders where the annual amortization was not included in rates. In fact, our position with respect to granting a return on an acquisition adjustment but no return of an acquisition adjustment is consistent with past practice of this Commission. As can be seen from reviewing Petitioner's Exhibit JLC-2,

Schedule 3, "Summary of Acquisition Adjustments," Indiana-American's two (2) acquisition adjustments prior to the Indiana Cities' acquisition are included in rate base but the annual amortization is treated as a below-the-line item. Thus, we conclude that our position to allow a return on the amortized balance of the Indiana-Cities' acquisition adjustment is consistent with our prior orders and is fair and reasonable because we have provided Petitioner with additional compensation by not applying interest synchronization to the Indiana-Cities' acquisition premium.

3. Turkey Creek and Westwood Acquisition Adjustments

The Company did not contest the OUCC's proposed elimination of acquisition adjustments for the Turkey Creek and Westwood acquisitions and, therefore, we will not consider favorable ratemaking treatment with respect to these two (2) acquisitions.

C. Quantification of Original Cost Rate Base

Based on the evidence and the findings made above, the Commission finds that the original cost of Petitioner's water and sewer utility properties used and useful for the convenience of the public is as follows:

ORIGINAL COST RATE BASE

	COMMISSION FINDING	
UTILITY PLANT IN SERVICE		
UTILITY PLANT IN SERVICE	$ 743,339,339	
MISCELLANEOUS REMOVALS FROM RATE BASE	(946,378)	*
E-CIS SOFTWARE (*See* Sect. XI. B. 5.)	659,378	**
CAPITALIZED TANK PAINTING	618,576	
DEFERRED DEPRECIATION	2,394,136	
POST IN SERVICE AFUDC	4,280,607	
TOTAL PLANT IN SERVICE	$ 750,345,658	
ACCUMULATED DEPRECIATION		
UTILITY PLANT IN SERVICE	$ 169,763,405	
MISCELLANEOUS REMOVALS FROM RATE BASE	(304,020)	***
CAPITALIZED TANK PAINTING	423,626	
DEFERRED DEPRECIATION	619,527	
POST IN SERVICE AFUDC	1,018,365	
TOTAL ACCUMULATED DEPRECATION	$ 171,520,903	
NET UTILITY PLANT IN SERVICE	$ 578,824,755	
DEDUCTIONS:		
CIAC	$ 68,021,992	
ACCUMULATED AMORTIZATION OF CIAC	-	
CUSTOMER ADVANCES FOR CONSTRUCTION	43,277,659	
CAPACITY ADJUSTMENT	175,990	
TOTAL DEDUCTIONS	$ 111,475,641	
ADDITIONS		
ACQUISITION ADJUSTMENT (NET)	$ 1,086,259	
LESS: TURKEY CREEK (NORTHWEST) & WESTWOOD (W.LAFAYETTE)	(139,064)	
MATERIALS AND SUPPLIES	1,571,215	
TOTAL ADDITIONS	$ 2,518,410	
TOTAL ORIGINAL COST RATE BASE	**$ 469,867,524**	

Note: The totals marked with *, ** and *** are calculated in the tables below.

UTILITY PLANT IN SERVICE	COMMISSION	
WATER GROUPS – Public's Exhibit 3, Sch. 1.	**FINDING**	
Excessive Capacity- Seymour Wells	-	
Excessive Capacity- S. Indiana Pumps	$ 753,378	
Muncie Meters	193,000	
Repl 2 1/2 ton truck- partial support	-	
INS Coating System @ I-65- partial support	-	
INS Lab Equipment- partial support	-	
TOTAL UTILITY PLANT IN SERVICE ADJ.	**$ 946,378**	*
E-CIS CALCULATION (*See*, Sect. XI. B. 5.)		
ORIGINAL COST OF ECIS SOFTWARE	$ 7,326,422	
INDIANA ALLOCATION OF SOFTWARE COST %	9%	
INDIANA ALLOCATION OF SOFTWARE COST	**$ 659,378**	**
ACCUMULATED DEPRECIATION		
WATER GROUPS – Public's Exhibit 3, Sch. 1.		
Excessive Capacity- Seymour Wells	-	
Excessive Capacity- S. Indiana Pumps	$ 232,248	
Muncie Meters	71,772	
Repl 2 1/2 ton truck- partial support	-	
INS Coating System @ I-65- partial support	-	
INS Lab Equipment- partial support	-	
Total	**$ 304,020**	***

D. Update of Prior Fair Value Finding

Petitioner's witness James Cutshaw evaluated Petitioner's proposed fair value increment by recomputing Petitioner's proposed cost of capital after deducting inflation from the cost of its outstanding debt, and multiplying that rate times a fair value rate base determined by updating the fair value finding from Petitioner's last rate order for new additions and inflation. To implement this methodology, Mr. Cutshaw updated the fair value finding in the 2002 Rate Order ($639,949,626) for inflation since the valuation date in the 2002 Rate Order using inflation rate data from the Valuation Edition of the Ibbotson Associates' publication, *Stocks Bonds Bills and Inflation 2003 Yearbook* ("*SBBI 2003 Yearbook*"). (*Petitioner's Exhibit JLC*, p. 12.) This publication is commonly used as a source of data for cost of capital studies. Mr. Cutshaw pointed out that this methodology is consistent with our Order in *PSI Energy, Inc.*, Cause No. 40003, 18; 173 PUR4th 393, 410 (Indiana Utility Regulatory Commission, Date Issued Sept. 27, 1996) and Indiana-American's 1997 and 2002 Rate Orders. To this total, Mr. Cutshaw added net investor-supplied plant additions since the last rate base valuation date to arrive at a total updated fair value estimate of $663,437,626. (*Petitioner's Exhibit JLC*, pp. 12-13; *Petitioner's Exhibit JLC-1*, *Sched. 4*, line 24.) Although OUCC witness Gassert disagreed with Mr. Cutshaw's inflation adjustment procedure, he did not disagree with the updated fair value amount and, in fact, used it in his own analysis. (*Public's Exhibit 5*, p. 21, line 19 through p. 22, line 3.) We

shall discuss the issue of how to compute the rate of return applicable to the fair value rate base later.

E. Reproduction Cost New Less Depreciation

Petitioner's Position. A valuation of the reproduction cost new less depreciation ("RCNLD") of Petitioner's utility property as of December 31, 2003, was sponsored by Alan J. DeBoy. (*Petitioner's Exhibit AJD-1 and AJD-2.*) As part of his job responsibilities, Mr. DeBoy has visited and inspected each of Petitioner's operations and their associated facilities. (*Id.* at p. 8, lines 4-7.) Mr. DeBoy expressed the opinion that Petitioner's plant and systems are in a good state of operating condition, well maintained and used to provide utility service to the public. (*Id.* at p. 8, lines 9-12.)

RCNLD represents the cost of reproducing the existing system at present day costs, reduced for the loss in value experienced by the existing system due to wear and tear, obsolescence and lack of utility. (*Id.* at p. 9, lines 2-4.) Mr. DeBoy determined the reproduction cost new ("RCN") of Petitioner's utility property by applying cost trend factors to the original cost by vintage year of the various components of Petitioner's property (excluding land). (*Id.* at p. 9, line 16 through p. 10, line 8.) Mr. DeBoy said Petitioner's accounting records provide the necessary detail for a trended original cost study. (*Id.* at p. 10, lines 8-10.) The primary source for the trend factors used in Mr. DeBoy's study was the *Handy-Whitman Index of Public Utility Construction Costs for Water Utilities*, particularly utilities located in the North Central United States. (*Id.* at p. 11, lines 1-6.) Mr. DeBoy stated that he believed the *Handy-Whitman Indexes* are reasonable to use for estimating RCN because they were developed specifically for that purpose. (*Id.* at p. 12, lines 1-4.) Mr. DeBoy also testified that the *Handy-Whitman Indexes* have been published continuously since 1924 and are well-recognized around the country as suitable for determining the RCN of utility property. (*Id.* at p. 12, lines 20-22.)

Mr. DeBoy determined the RCNLD by deducting from the RCN depreciation necessary to reflect the current condition of the property. (*Id.* at p. 18, lines 12-17.) Mr. DeBoy calculated the percent condition of Indiana-American's property to be 77.12%. (*Id.* at line 18.) This ratio reflects the inverse of the relationship of the depreciation reserve to the cost of the plant. Mr. DeBoy asserted that this method is well accepted and recognized by the Commission and the Courts.

Mr. DeBoy's study quantified the RCNLD of Petitioner's used and useful utility plant in service as of December 31, 2003, to be not less than $1,242,525,436 after adjustment for 77.12% condition (depreciation) as follows:

Indiana-American, excluding Northwest	$ 841,421,166
Northwest	401,104,265
Total	$1,242,525,436 [sic]

Petitioner's Exhibit AJD, p. 18, line 19 through p. 19, line 2 (correct total is $1,242,525,431).

OUCC's Position. The OUCC presented the testimony of Scott A. Bell, Assistant Director of the Public's Sewer/Water/Rates Division, in response to Mr. DeBoy's testimony

regarding Petitioner's RCNLD study and to Dr. John A. Boquist's testimony regarding "replacement cost rate base." Petitioner's witness, Dr. Boquist, is the Edward E. Edwards Professor of Finance at the Indiana University Graduate School of Business in Bloomington, Indiana.

Mr. Bell testified that Petitioner has presented a RCNLD study to support a fair value rate base figure in each of its last eight (8) rate cases. (*Public's Exhibit 8*, p. 6, lines 10-12.) He noted that in Indiana-American's last four (4) rate cases (Cause Nos. 42029, 41320, 40703 and 40103), Dr. Boquist provided testimony on fair value rate base and replacement cost rate base values. (*Id.* at p. 6, lines 12-14.) In addition, Mr. Bell acknowledged the Commission has accepted Indiana-American's RCNLD studies into the record as evidence in each of these cases.

However, Mr. Bell pointed out that this Commission has consistently determined that the fair value rate base is not equal to Indiana-American's proposed RCNLD value or its Replacement Cost Rate Base value. (*Id.* at p. 6, lines 15-21.) He created the following table of Petitioner's past eight rate cases to illustrate his point:

Cause No.	Final Order Date	Commission's Determination of Original Cost Rate Base	Petitioner's Proposed RCNLD or "Replacement Cost Rate Base" Value	Commission's Fair Value Rate Base Determination
42029	11/06/02	403,085,800	* 756,281,105	562,680,669
41320	07/01/99	293,003,938	* 492,108,096	No Determination
40703	12/11/97	221,628,031	* 398,701,046	311,804,823
40103	05/30/96	186,279,406	* 303,571,716	261,571,000
39595	02/02/94	114,762,256	299,336,080	166,500,000
39215	05/27/92	107,435,891	289,367,162	155,800,000
38880	09/26/90	90,964,050	273,239,652	127,000,000
38347	07/06/88	80,721,738	209,196,578	107,415,200

* RCNLD value adjusted downward for technological change by Dr. Boquist to determine "Replacement Cost Rate Base."

Id. at p. 6, line 24, though p. 7.

In addition, Mr. Bell testified this Commission has considered RCNLD studies in other utilities' rate cases. However, Mr. Bell testified that this Commission has not equated fair value and RCNLD results in other utility cases. He stated the Commission has "consistently found utilities' fair value rate bases to be significantly less than the RCNLD values." (*Id.* at p. 7, lines 15-16.)

Mr. Bell went on to note that the Commission echoed the OUCC's concerns regarding use of RCNLD studies in prior Indiana-American rate cases. Specifically, Mr. Bell provided the following quote from the Commission's 2002 Rate Order:

> The Commission is equally dubious of the Petitioner's proposed valuation. In reviewing past Commission determinations of fair value for this utility, the Petitioner's proposed valuation represents a considerable leap in value, with no compelling justification given to support such an increase.

Ind.-Am. Water Co., Cause No. 42029, p. 28, lines 1-10; cited by *Public's Exhibit 8*, p. 8, lines 1-10.

He also quoted from the Commission's Order in *Northwest Indiana Water Company*, Cause No. 40467:

> We are faced with a concern that plagues all reproduction cost new studies, which is the very real probability that Petitioner's system would not in fact be reproduced in the same fashion today. Efficient planning, efficient construction, advances in technology, shifting demands and location for water and numerous other factors must first accurately be reflected otherwise a reproduction cost new study cannot be said to reflect fair value. Accordingly, while we will take Petitioner's proposed RCNLD into consideration in making our judgment as to what is an appropriate "fair value" for Petitioner's utility plant, we will be fully mindful of the inherent limitations of Mr. Smith's methodology and the theory of reproduction cost new.

Northwest Ind. Water Co., Cause No. 40467, 21-22 (Indiana Utility Regulatory Commission, Date Issued March 26, 1997) (cited by *Public's Exhibit 8*, p. 8, line 11 through p. 9, line 12).

Mr. Bell contended that the Company's plant would not remain the same if it were to be rebuilt today. He cited several Commission cases in which the Commission has expressed concern about using RCNLD studies to determine fair value rate base. Based on these prior Commission rate cases, Mr. Bell concluded that RCNLD studies have not been useful indicators of fair value. Mr. Bell therefore recommended this Commission not grant more weight to Petitioner's RCNLD study than we have in previous rate cases. (*Id.* at p. 9, line 13 through p. 10, line 7.)

Petitioner's Rebuttal. In rebuttal, Mr. DeBoy testified that, even if Petitioner's system would not remain exactly the same if rebuilt today, the RCNLD would not be less than the results presented in his study. (*Petitioner's Exhibit AJD-R*, p. 3, lines 5-15.) In fact, Mr. DeBoy noted that his study was conservative because it did not include the additional cost of working around or dealing with roadways, driveways and other surface improvements as well as underground utilities that would be required today. (*Id.* at p. 2, lines 2-18.) Furthermore, Mr. DeBoy noted that it would have been inefficient if the initial system had been designed and built to accommodate Petitioner's current customer demands. (*Id.* at p. 3, lines 10-12.) He further stated that differences in management practices and management personnel are not relevant because Petitioner's system is designed based on engineering standards and practices. (*Id.*) Finally, Mr. DeBoy responded to Mr. Bell's criticism of reliance on RCNLD studies by noting that Mr. Bell himself relied upon such studies in Cause Nos. 39838, 39839, 39840 and 39841 to determine the RCNLD of four (4) systems now owned by Petitioner. (*Id.* at p. 2, line 20 through p. 3, line 3.)

Commission Discussion and Findings. The Commission has long taken RCNLD studies into consideration in setting rates. We recently noted that "[t]his Commission has routinely accepted RCNLD studies into the record and considered them as evidence in support of Petitioners' fair value." (*South Haven Sewer Works, Inc.*, Cause No. 41903, 2 (Indiana Utility Regulatory Commission, Date Issued June 5, 2002).) In *Northwest Indiana Water Co.*, Cause No. 40467, we responded to arguments of the OUCC similar to those made here by Mr. Bell as follows:

> The OUCC's arguments regarding RCNLD are familiar to us. We recognize that no RCNLD study will achieve absolute perfection. Yet, as we have said many times previously, "[r]atemaking is, at best, an imprecise art." *Indiana Gas Co.*, Cause No. 36816, 49 PUR4th 594, 609 (PSCI 10/27/82). This Commission routinely must rely on estimates which, we recognize, "can only be reasonable approximations." *Boone County Rural Elec. Membership Corp. v. Public Serv. Comm'n*, 239 Ind. 525, 535; 159 N.E.2d 121, 125 (1959). Accordingly, despite the minor shortcomings identified by the OUCC, we have found the use of the *Handy-Whitman Index* to be reliable in conducting RCNLD studies. *Ind. Cities Water Corp.*, Cause No. 39166 (Indiana Utility Regulatory Commission, Date Issued July 8, 1992); *Ind.-Am. Water Co.*, Cause No. 39215 (Indiana Utility Regulatory Commission, Date Issued May 27, 1992). We have also found that evidence of RCNLD is helpful in the task of determining fair value. See Id.; *S. Ind. Gas & Elec. Co.* ("SIGECO"), Cause No. 39871, 18 (Indiana Utility Regulatory Commission, Date Issued June 21, 1995).

Northwest Ind. Water Co., Cause No. 40467, p. 21.

Mr. Bell's prior reliance on this methodology also demonstrates its usefulness. Indeed, as a matter of law, "reproduction cost new cannot be disregarded in fixing a valuation for rate making purposes." (*Pub. Serv. Comm'n v. City of Indianapolis*, 235 Ind. 70, 108, 131 N.E.2d 308, 325 (1956).) Reproduction costs take into consideration inflation which the Commission may not ignore. (*Indianapolis Water Co. v. Public Serv. Comm'n*, 484 N.E.2d 635, 640 (Ind. Ct. App. 1985).) We therefore find that a reasonable estimate of the RCNLD of Petitioner's utility plant in service is $1,242,525,436.

F. Replacement Cost Less Depreciation

Petitioner's witness, Dr. John A. Boquist, testified that in economic theory the fair value of property should represent the depreciated replacement cost of the property, i.e., the cost today of similar assets with the same function and service potential. This definition captures the opportunity costs associated with allowing a firm to control its assets for the production of goods and services according to its business strategy. Any strategy which results in a value less than the assets' replacement cost should be abandoned, and the assets dedicated to other opportunities. This valuation concept is consistent with the work of James Tobin, developer of the "Tobin's q ratio," a widely accepted and recognized method of investment analysis which compares the market value of assets to their replacement cost.

Dr. Boquist said that the replacement cost of assets can be affected by technological change. Dr. Boquist testified that, while Mr. DeBoy's RCNLD value already reflects the impact of present day construction practices, to make sure the impact of technological change was not understated in the replacement cost estimate, he asked the Company to make a downward adjustment to Mr. DeBoy's RCNLD computation of 1.347% per year. This is the long-run average annual rate of change in multifactor productivity in the U.S. manufacturing sector during the period of 1948 through 2001 as reported by the U.S. Bureau of Labor Statistics. This adjustment results in an estimate of replacement cost less depreciation as follows:

Indiana-American, excluding Northwest	$605,575,457
Northwest	270,079,469
Total	$875,654,926

Petitioner's Exhibit AJD, p. 19, lines 4-9.

This amount when combined with other components of Petitioner's rate base results in a replacement cost less depreciation value of $882,408,588. (*Petitioner's Exhibit JAB*, p. 61; *Petitioner's Exhibit JAB-6*.) Dr. Boquist testified that this was a conservative estimate of fair value because land has been included at original cost (instead of its current value) and the 1.347% rate for technological change probably exceeds the rate experienced by the water industry. Accordingly, we find the replacement cost less depreciation value to be $882,408,588.

G. Fair Value

Indiana Code § 8-1-2-6 establishes that this Commission shall value a public utility's property at its "fair value." In *Indianapolis Water Co. v. Public Service Commission* (Ind. Ct. App. 1985), the Indiana Court of Appeals confirmed that a utility should be entitled to earn a fair rate of return on the fair value of its rate base. Furthermore, in its determination of "fair value" the Commission may not ignore the commonly known and recognized fact of inflation. (*Indianapolis Water Co.*, p. 640.) In *Indianapolis Water*, the Court of Appeals reaffirmed its holding in *Public Service Commission v. City of Indianapolis*, stating that "reproduction cost new cannot be disregarded in fixing a valuation for rate making purposes." (*Public Serv. Comm'n*, 235 Ind. 108, 131 N.E.2d 325 (1956).) The Court of Appeals expressly stated that this observation is as pertinent today as in 1956. The Court of Appeals has more recently confirmed that the Commission must authorize rates that provide the utility with the opportunity to earn a fair rate of return on the fair value of its property. (*Gary-Hobart Water Corp. v. Office of Util. Consumer Counselor*, 591 N.E.2d 649, 653-654 (Ind. Ct. App. 1992), reh'g denied July 1992; *Office of Util. Consumer Counselor v. Gary-Hobart Water Corp.*, 650 N.E.2d 1201 (Ind. Ct. App. 1995).)

As previously discussed, we will compensate Petitioner for the investment that made the Indiana Cities acquisition possible in the fair value return authorized herein. Such a result is well within the scope of the evidence, which includes quantification of the difference between the purchase prices and book values, the reproduction cost new less depreciation of Petitioner's utility properties, the replacement cost less depreciation of Petitioner's utility properties and an updating of our last fair value finding for inflation and new additions.

Based on the evidence of record, we find that the fair value of Indiana-American's utility property used and useful in the provision of utility service is not less than $663,400,000.

X. FAIR RATE OF RETURN

Having determined the fair value of Petitioner's property, the Commission must determine what level of net operating income represents a reasonable rate of return. This determination requires a balancing of the interests of the investors and the consumers. In *Bethlehem Steel Corp. v. Northern Indiana Public Service Co.*, the Indiana Supreme Court instructs that "[w]hat annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts." (397 N.E.2d 623, 630 (Ind. App. 1979)(quoting *Bluefield Water Works and Improvement Co. v. Public Serv. Comm'n*, 262 U.S. 679, 692 (1923)).) One consideration in evaluating the reasonableness of a utility's return is the utility's overall weighted cost of capital.

A. Cost of Common Equity

Petitioner's Position. Petitioner presented the testimony of Dr. John Boquist on Petitioner's cost of common equity. In his direct testimony Dr. Boquist expressed the opinion that an 11.00% cost of common equity would be reasonable for Petitioner. (*Petitioner's Exhibit JAB*, p. 33, lines 6-14; *See Petitioner's Exhibit JAB-5.*)

In examining the cost of common equity, Dr. Boquist first employed the discounted cash flow ("DCF") model. Dr. Boquist testified that the DCF model stems from the assumption that investors are interested in the expected dividend yield and the future long-run growth in dividends. He said the annual form of the DCF model is simple but has two (2) inherent problems. First, it assumes annual dividends, while virtually all firms pay more frequent quarterly dividends, and quarterly dividends have greater value because they can be put to other profitable uses. Second, the DCF model assumes a single constant growth rate in perpetuity, which is an unrealistic assumption because dividend growth rates change over time and the ability to forecast what will happen to a single company in perpetuity from currently available company-specific data is problematic.

Dr. Boquist stated that he addressed these problems by reformulating the model in two respects. First, he incorporated quarterly dividend payments. Second, he used a two-stage model that reflected company-specific growth rates for the first ten (10) years (the first stage) and a growth rate reflective of the overall economy thereafter (the second stage). Since Petitioner's common stock is not publicly-traded, Dr. Boquist applied his DCF model to the three (3) publicly-traded water companies followed by Value Line Investment Survey ("Value Line") as a sample group.

Current dividends and stock prices for the sample companies were used to determine the current dividend yield. Dr. Boquist converted the current dividend yield to a forward-looking basis by applying his estimate of one (1) year of dividend growth. He used a growth rate in the first stage equal to Value Line's projection of each company's growth in cash flow. Dr. Boquist stated that for the water industry today, particularly given the recent lowering of the tax rate on

dividends which encourages dividend increases, estimated cash flow growth best reflects investor expectations for these stocks. For the second stage, Dr. Boquist used a growth rate of 6.32%, the average growth rate of the gross domestic product ("GDP") since 1980. Dr. Boquist pointed out that this rate is virtually identical to the 6.3% estimate of nominal long-term GDP growth used in the *SBBI 2003 Yearbook*. This DCF approach arrived at an unadjusted result of 10.00%. (*Petitioner's Exhibit JAB*, p. 21, lines 1-3.)

Dr. Boquist made an upward adjustment of 1.00% or 100 basis points to the unadjusted DCF result to reflect Petitioner's greater inherent level of risk relative to the proxy group. Dr. Boquist stated that this greater level of risk stemmed from Petitioner's relatively small size, its investment quality, the relatively limited marketability of its securities and its limited service area. In making the adjustment Dr. Boquist considered the current yield spreads between various ratings of utility bonds and between utility bonds and treasury bonds. (*Petitioner's Exhibit JAB-4.*) Dr. Boquist said that investors are currently demanding extra returns to induce them to buy lower quality issues, a situation referred to as a "flight to quality." Dr. Boquist's adjusted DCF result was 11.00%. (*Petitioner's Exhibit JAB-5.*)

Dr. Boquist also used the capital asset pricing model ("CAPM"), which holds that the cost of equity is equivalent to the return on a riskless security plus a risk premium appropriate for the company being analyzed. The risk premium represents the equity risk premium for the entire market (the "market risk premium") multiplied by the beta coefficient ("beta") of the company. The beta measures the responsiveness of a common stock's rate of return to that of the overall market. In applying the CAPM, Dr. Boquist used a beta of 0.633, the average beta of the sample group as reported by Value Line. The market risk premium was represented by the difference between the long-run (post-1926) arithmetic average rate of return on the Standard & Poor's 500 ("S&P 500") and the average long-term government bond income return (interest) for the same period as reported in *SBBI 2003 Yearbook*. Dr. Boquist used as the riskless rate the greater-than-ten (10) year maturity treasury bond yield computed by Merrill Lynch and reported in the Wall Street Journal (the "Merrill Lynch 10+ year treasury index"). Dr. Boquist stated that this index has a par value weighted average maturity of approximately twenty (20) years which matches the maturity used by Ibbotson Associates in calculating the historical treasury bond returns. Dr. Boquist's unadjusted CAPM result for the proxy group was 9.59%. (*Petitioner's Exhibit JAB*, p. 25, lines 20-22; *Petitioner's Exhibit JAB-2*, line 7.)

Dr. Boquist increased this result by 2.06% (206 basis points) to 11.65% to adjust for the small stock risk premium specified in the *SBBI 2003 Yearbook* for companies with an equity market capitalization between $314.2 million and $521.3 million. (*Petitioner's Exhibit JAB*, p. 27, lines 20-21; *Petitioner's Exhibit JAB-2*, lines 8-9.) Dr. Boquist said this adjustment was necessary because Ibbotson Associates uses the large company stocks in the S&P 500 as a proxy for the market. Dr. Boquist cited the *SBBI 2003 Yearbook* which explains that a size adjustment is necessary because "even after adjusting for the systematic (beta) risk of small stocks, they outperform large stocks." (*Petitioner's Exhibit JAB*, p. 30.) Dr. Boquist testified that Ibbotson Associates gives substantial attention to the manner in which this adjustment can be made with their data, and he followed their procedure.

Dr. Boquist testified that it was necessary to use the treasury bond income return (interest) rather than the total return (interest and changes in value) in determining the market

risk premium because only the income return is truly riskless to investors. (*Id.* at p. 28.) Dr. Boquist said the arithmetic averages must be used because the purpose is to estimate uncertain future returns, not measure historical performance. He cited a number of authorities supporting this view.

Dr. Boquist testified that a higher recommendation than 11.00% could easily be supported by giving more weight to the CAPM result because the CAPM accounts explicitly for risk relative to the overall market and the DCF model tends to understate the cost of common equity. He noted that the Commission has recognized the understatement inherent in the DCF a number of times, including its Order in *PSI Energy, Inc.*, Cause No. 40003 (Sept. 1996).

Dr. Boquist also discussed the understatement in the required return that will result if the market-derived cost of capital is applied to an original cost (book value) rate base when the market value of stock exceeds book value as is generally the case today. He noted that the average market-to-book ratio of the three (3) sample companies is 2.18, i.e. the average market value of their stock exceeds the book value of their stock by 2.18 times. He suggested some ways of responding to this issue would be to (1) make a market-to-book adjustment to the market-derived common equity models; (2) use the book value of stock, rather than the market value of stock, to determine the dividend yield in the DCF model; (3) use a market value capital structure, rather than a book value capital structure, which would increase the equity ratio and thus the overall weighted cost of capital; and/or (4) use a fair value rate base. Dr. Boquist said he would use the last alternative. This subject will be discussed hereafter.

OUCC's Position. The Public's witness, Mr. Edward Kaufman, Lead Financial Analyst in the OUCC's Rates/Water/Sewer division, used two (2) proxy groups to estimate cost of equity in this Cause. The first ("primary") proxy group was the same proxy group of water companies that Dr. Boquist used. The second ("secondary") proxy group included three (3) additional water companies not used by Dr. Boquist. Mr. Kaufman indicated that both of his proxy groups produced similar results.

Mr. Kaufman used both a DCF model and a CAPM analysis to reach his estimated cost of common equity for Petitioner of 8.75%. Mr. Kaufman's DCF analysis produced a range of 8.52% to 8.57%, while his CAPM analysis produced a range of 7.52% to 9.08%. Mr. Kaufman concluded that Petitioner was similar in size to two (2) of the three (3) companies in Dr. Boquist's proxy group and larger than the three (3) companies that Mr. Kaufman added to make up his secondary proxy group. Based on Petitioner's size compared to the companies in both proxy groups, Mr. Kaufman concluded that a small company risk adjustment was not merited for a company as large as Indiana-American Water Company. In addition, Mr. Kaufman quoted from Mr. John Eckart's testimony in Cause No. 42250, where Mr. Eckart asserted that American Water Works' acquisition by RWE would increase Indiana-American's access to capital markets. Mr. Kaufman also pointed out that in Cause No. 42488 Petitioner's witness Pauline Ahern had recommended a small company risk premium of only 25 basis points for Twin Lakes Utilities (A utility with only 5,000 customers). Mr. Kaufman's cost of equity estimates ranged from 7.52% to 9.08%. Mr. Kaufman then recommended a cost of equity of 8.75%.

Mr. Kaufman relied on the more traditional single stage DCF model. He based his estimate of growth (g) on historical and forecasted growth in earnings per share ("EPS"),

dividends per share ("DPS"), and book value per share ("BVPS"). Mr. Kaufman also completed a CAPM analysis. His CAPM analysis relied on both an arithmetic and geometric mean risk premium. Mr. Kaufman also relied on total bond returns instead of income bond returns to estimate the market risk premium.

Although Mr. Kaufman relied on Value Line to estimate beta for his cost of equity analysis, his testimony indicates that he reviewed several sources of beta including Merrill Lynch, SmartMoney.com and Yahoo.com. Mr. Kaufman's testimony also indicated that Value Line produced the highest source of beta of all the sources he reviewed.

Mr. Kaufman asserted that an 8.75% cost of equity was reasonable in today's markets. Mr. Kaufman pointed out the forecasted inflation over the next few years was expected to remain low and asserted that lower inflation rates translate directly into lower capital costs. Mr. Kaufman cited to an article by Fama & French (the same analysts Dr. Boquist relied on for his return on replacement cost analysis), supporting a long term expected market return of 8.0% to 8.5%. Next, Mr. Kaufman cited to an article by John Bogle, founder of Vanguard Group, which forecasted a stock market return of 6.0% to 9.0% per year over the next decade. Mr. Kaufman also cited a book by Dr. Jeremy Siegel, *Stocks for the Long Run,* that forecasted a real (before inflation) return for the market of 6.6% to 7.2%. Mr. Kaufman then noted that when current forecasted inflation rates of 2.2% to 2.5% are combined with Dr. Siegel's forecasted market returns, it produces a market return of 8.9% to 9.9%.

Mr. Kaufman commented that since Petitioner was less risky than the overall market, and should have a lower expected return than the overall market, his proposed cost of equity was reasonable and consistent with the market forecasts made by John Bogle, Dr. Siegel and the Fama-French analysis. Finally, Mr. Kaufman cited to an order issued in West Virginia-American's recent rate case where the West Virginia Commission authorized a 7.0% cost of equity.

Mr. Kaufman criticized Dr. Boquist's two-stage DCF analysis. While accepting the theory behind the two-stage DCF model, Mr. Kaufman did not agree with Dr. Boquist's applications. Dr. Boquist's analysis assumes that for the next ten (10) years the dividends for each of the water companies in his proxy will grow at their three (3) to five (5) year forecasted growth rate in cash flow per share. His analysis then assumes that dividends will grow at the average historical growth rate of the United States Gross Domestic Product from 1980-2002, or 6.32%, in perpetuity after that. Mr. Kaufman criticized Dr. Boquist's analysis because he provides no basis to assume that each company in his proxy group will grow at the same rate in its mature stage. There was also no basis to assume that each company in Dr. Boquist's proxy group will reach its mature or a steady stage of growth at the same time. Some if not all of the companies in Dr. Boquist's proxy may have already reached their mature or steady rate of growth. Mr. Kaufman concluded that if one uses reasonable assumptions and tailors a two-stage DCF analysis to the specific conditions for each of the companies in a proxy, a two-stage DCF analysis could have merit. However, according to Mr. Kaufman, Dr. Boquist did not tailor his DCF analysis to be specific for each company and, therefore, Mr. Kaufman does not believe his assumptions are reasonable.

As an example, Mr. Kaufman cited to Dr. Boquist's analysis of one of the water companies used in his proxy group, American States Water. Mr. Kaufman testified that Dr. Boquist's analysis assumes that American States Water's dividends will grow at an average rate of 5.5% for the next ten (10) years and then will somehow increase to an average growth rate of 6.32% for the years 2014 and beyond. Without a company-specific analysis to explain why Dr. Boquist would expect American States Water's dividends to grow in that manner, Mr. Kaufman was unable to accept Dr. Boquist's assumption.

Mr. Kaufman also asserted that water company dividends will grow more slowly than the overall growth rate of the U.S. economy. Water utilities traditionally have relatively high dividend payout ratios, and therefore, low retention ratios. To illustrate, in 2003 California Water (CWT), another proxy company, had a payout ratio of almost 109% (CWT paid dividends of $1.12 per share on earnings of $1.01 per share) and a retention ratio of -9.0%. Mr. Kaufman stated that companies with high payout ratios are by definition retaining or reinvesting a smaller percentage of their earnings back into the company which causes slower earnings growth. Slower earnings growth in turn leads to slower dividend growth. Furthermore, dividend growth cannot indefinitely exceed earnings growth. Therefore, according to Mr. Kaufman, due to their higher payout ratios and lower retention ratios, it is unreasonable to assume that water utility dividends will grow as quickly as the U.S. economy.

Next, Mr. Kaufman stated that Dr. Boquist had overstated his estimate of growth in the U.S. economy. Mr. Kaufman asserted that, even if one accepts the premise that water utility dividends will grow as quickly as the U.S. economy, he believed that Dr. Boquist's analysis overstates the future growth rate of nominal GDP and subsequently overstates forecasted dividend growth for the second stage in his two-stage DCF model. To estimate the future growth rate of the U.S. economy, Dr. Boquist averages the growth rate of nominal GDP over the last twenty-three years (1980-2002). Mr. Kaufman asserted it would be more reasonable to use a forecasted growth rate of GDP than it is to rely on historical data, because the growth rate of nominal GDP and inflation have slowed significantly when compared to the growth rate of nominal GDP and inflation from the early 1980s. Furthermore, both the growth rate of the U.S. economy and the rate of inflation are forecasted to remain low. Thus, in his opinion, Dr. Boquist's reliance on historical nominal GDP overstates forecasted growth in nominal GDP and subsequently overstates his own estimate of dividend growth.

Furthermore, notwithstanding Dr. Boquist's premise that water company dividends will grow as quickly as the U.S. economy and his opinion that it is more appropriate to rely on historical data than it is to rely on forecasted data, Mr. Kaufman still believed Dr. Boquist's analysis overstated the expected growth rate in the U.S. economy and the subsequent forecast of dividend growth. Mr. Kaufman asserted that Dr. Boquist's reliance on historical growth in nominal GDP is based on data for the twenty-three (23) year period from 1980-2002 and seems somewhat subjective. Mr. Kaufman stated it would seem more appropriate to use a ten (10) year average of growth in nominal GDP to match Dr. Boquist's use of a ten (10) year period for the first stage of his DCF analysis. The ten (10) year average growth rate of nominal GDP of the U.S. economy was 5.16% (1993-2002). If Dr. Boquist used a 5.16% growth rate in the second stage of his DCF analysis, it would have reduced his unadjusted DCF estimate of Petitioner's cost of equity by 84 basis points from 10.00% to 9.16%.

Next, Mr. Kaufman emphasized that Dr. Boquist's analysis assumed a dividend stream that does not exist because it assumes dividends will grow each and every quarter. Mr. Kaufman stated that he was not aware of any publicly traded company that raises its dividends on a quarterly basis. By assuming that dividends increase every quarter, Dr. Boquist's analysis inflates the stream of dividend payments that the shareholder will receive. The higher dividend stream will lead to a higher estimated cost of equity. As such, the quarterly version of Dr. Boquist's two-stage DCF model inflates his estimate of Petitioner's cost of equity. Dr. Boquist cites the works of Dr. Ibbotson and Dr. Morin to support his DCF analysis. However, Mr. Kaufman testified that neither Dr. Ibbotson nor Dr. Morin employ a quarterly DCF model in the same manner that Dr. Boquist does in this Cause and that Dr. Boquist's DCF model is his own interpretation and is not directly supported by Dr. Morin or Dr. Ibbotson.

On page 41 of his testimony Mr. Kaufman also quoted from the Commission's Final Order in Petitioner's previous rate case, Cause No. 42029, as follows:

> As we noted in Cause No. 40103 the Commission expects the parties to exercise sound judgment when deciding which inputs to include as part of their analysis. This Commission has concerns regarding Dr. Boquist's implementation of the two-stage DCF model. Dr. Boquist has used a high estimate of dividend growth (g) for the second stage of his DCF model. Additionally, Dr. Boquist's quarterly DCF analysis assumes dividends will grow each and every quarter.

Ind.-Am. Water Co., Cause No. 42029, p. 83. Mr. Kaufman claimed that the two-stage DCF model that Dr. Boquist uses in this case suffers from the same flaws that the Commission criticized in Petitioner's last rate case.

Mr. Kaufman also criticized Dr. Boquist's use of forecasted cash flow per share of 7.17% for the first stage in his DCF analysis. Mr. Kaufman pointed out that this was the first time in five Indiana-American rate cases that Dr. Boquist had relied on forecasted cash flow per share in a DCF analysis. Mr. Kaufman then pointed out the change in Dr. Boquist's methodology from ten (10) year historical dividend growth to three (3) to five (5) year forecasted cash flow growth increased Dr. Boquist's estimate of growth (g) by 450 basis points. Next, Mr. Kaufman asserted that, since both Value Line and CA Turner are both forecasting relatively slower growth in dividends over the next five (5) years, he did not believe that using forecasted growth in cash flow was justified. Finally, Mr. Kaufman asserted that it was inappropriate to rely on any single estimator of growth because it ignored relevant information.

Mr. Kaufman also criticized Dr. Boquist's CAPM analysis. Mr. Kaufman stated in the development of his CAPM analysis, Dr. Boquist considered only an arithmetic mean risk premium. Also, Dr. Boquist relied solely upon long-term interest rates. Mr. Kaufman asserted that depending on the period of analysis, either the arithmetic mean risk premium or the geometric mean risk premium can provide reliable cost of equity estimates if combined with the appropriate risk-free rate. An arithmetic mean risk premium is based on short-term (annual) returns, and an arithmetic mean risk premium can be combined with a short term interest rate. The geometric risk premium is a long term measure of returns, and it is appropriate to combine

the geometric mean risk premium with longer term interest rates. Mr. Kaufman explained that both methodologies have merit and should be given substantial weight.

Mr. Kaufman also criticized Dr. Boquist's use of bond income returns instead of total returns. On page 26 of his testimony, Dr. Boquist asserted that it is more appropriate to rely on income returns rather than total returns in estimating the market risk premium in his CAPM analysis. Although Mr. Kaufman acknowledged that Dr. Boquist's argument had some merit, he disagreed with his application.

Mr. Kaufman also challenged Dr. Boquist's 206 basis point adjustment to his CAPM analysis and his 100 basis point company-specific risk adjustment to his DCF model. In criticizing Dr. Boquist's 206 basis point adjustment to his CAPM analysis and his use of Dr. Ibbotson's small company adjustment, Mr. Kaufman asserted that these adjustments substantially overstate Petitioner's company-specific risk. As Ibbotson's equity size premium adjustment is based on the theory that smaller companies have earned returns above what would otherwise be predicted by a CAPM analysis, Mr. Kaufman stated he did not believe it is appropriate to directly apply Ibbotson's equity size premium adjustment to a regulated utility like Petitioner. He asserted that regulation decreases the risks faced by Petitioner. For example, Petitioner does not face the same bankruptcy risks that other small companies may face. Mr. Kaufman testified that the Commission supported the view that Ibbotson's micro cap adjustment cannot be blindly applied to utilities:

> We are familiar with the Ibbotson derived 400 basis point small company premium used by Mr. Beatty. The rationale behind this approach is that, all other things being equal the smaller the company, the greater the risk. However, to blindly apply this risk premium to Petitioner is to ignore the fact that Petitioner is a regulated utility. The risks from small size for a regulated utility are not as great as those small companies facing competition in the open market.

South Haven Sewer, Cause No. 40398, p. 30.

Mr. Kaufman also asserted that Ibbotson seems to recognize that its small company adjustment cannot be blindly applied to regulated water companies. The Valuation Edition of Ibbotson's *SBBI Yearbook 2001* provides estimates of industry-specific risk premiums. For the water supply industry, Ibbotson estimates a negative risk premium of 611 basis points. Thus, according to Mr. Kaufman, despite the smaller size of the companies included in the water supply industry, the water industry and the companies included in the water industry are significantly less risky than the overall market.

Mr. Kaufman then criticized Dr. Boquist's 100 basis point adjustment to his DCF model and stated it also overstated Petitioner's company-specific risk. In making his adjustment Dr. Boquist relied on or averaged the spread between A bonds vs. BBB bonds (47 basis points), and the spread between U.S. Treasury Securities and BBB bonds (184 basis points). Mr. Kaufman did not believe it is appropriate to use U.S. Treasury securities to estimate Petitioner's company-specific risk relative to the proxy group. In this analysis Petitioner is being compared to the proxy group. Mr. Kaufman further testified that the companies in Dr. Boquist's proxy have bond

ratings ranging from AA- to A+. None of these companies in Dr. Boquist's proxy have a bond rating equal to the full faith and credit of the U.S. Government and, as such, it did not make sense to compare the spreads between BBB bonds and U.S. Treasury securities when comparing Petitioner's company-specific risk relative to the proxy group. Mr. Kaufman testified that Dr. Boquist's analysis assumes that if Petitioner were rated it would have a bond rating of BBB, while the companies in the proxy group have bond ratings from AA- to A+. Thus, Mr. Kaufman claimed that it makes sense to calculate the spreads between BBB versus both AA and A bonds to make a company-specific risk adjustment. While Mr. Kaufman was not in complete agreement that Petitioner would be rated as low as BBB, he agreed that a comparison to AA and A bond yields would have logic, but a comparison to U.S. Treasury securities would not.

Mr. Kaufman pointed out that if Dr. Boquist's use of United States Treasury securities to estimate a company-specific risk adjustment for Petitioner is disregarded, Dr. Boquist's own evidence does not support a 100 basis point adjustment to account for Petitioner's company-specific risk. The average spread between BBB bonds and A bonds is 47 basis points. Thus, according to Mr. Kaufman, even if one assumed Petitioner was rated as low as BBB, Dr. Boquist's analysis would not support a 100 basis point adjustment.

Mr. Kaufman asserted that Dr, Boquist has not provided evidence to support his assumption that Indiana-American would be rated as low as BBB, if it were rated. In fact a review of Indiana-American's most recent debt offerings does not seem to support the contention that Indiana-American's debt would be rated as low as BBB. Finally, the company-specific risk adjustments proposed by Dr. Boquist in this Cause are larger than the company adjustments he proposed in Petitioner's prior rate cases.

Mr. Kaufman's testimony also included a schedule which illustrated the changes in Dr. Boquist's testimonies over the last four Indiana-American rate cases.

Intervenors' Positions. The Industrial Group presented the testimony of Mr. Gorman on rate of return, who recommended that the Commission find Petitioner's cost of common equity to be 9.75%. Mr. Gorman first assessed Petitioner's risk because the allowed rate of return should reflect the investment risk. (*Industrial Group Exhibit 1*, p. 4.) In Mr. Gorman's opinion, the fact that water utilities typically finance their plant with a higher percentage of debt than unregulated companies indicates low operating risk. (*Id.* at p. 5-6.) He noted that Petitioner primarily relies on a subsidiary when issuing its debt. (*Id.*) He also noted that while Petitioner receives the economies of scale by participating in a corporate wide debt issuance program, it also incurs substantial costs. He concluded that both the value and risk reduction of Petitioner's affiliation with its parent company should be recognized in developing the appropriate rate of return. (*Id.* at p. 7.)

Mr. Gorman generally agreed with Petitioner's capital structure, but noted that the retained earnings reflected in its capital structure should be modified to reflect the Commission's approved return on common equity. (*Id.* at pp. 8-9.)

Mr. Gorman used both the DCF and CAPM analyses to derive his recommended return on equity. Mr. Gorman used a single stage annual DCF model using Dr. Boquist's sample group.

He determined the dividend yield by dividing the current annualized dividend, adjusted for next year's growth, by a thirteen (13) week average stock price. He determined the growth rate by averaging various analyst forecasts of earnings growth for the sample companies. A common equity cost rate of 8.6% resulted from this procedure. (*Id.* at pp. 10-13.)

Mr. Gorman opined that his DCF result was reasonable because the yield component was reasonable in light of the utility group's earnings retention and reduction of federal tax on dividend income and in comparison to the projected yield on five-year treasury bonds. He also noted that his growth rate was sustainable because it did not exceed the growth rate of the overall U.S. economy. (*Id.* at pp 13-14.) According to Mr. Gorman, the "U.S. economy growth projection represents a ceiling for a sustainable growth rate for a utility over an indefinite period of time." (*Id.* at p. 14.)

Mr. Gorman also applied the CAPM, using a beta of 0.68, the average of the Value Line betas for the three companies. He developed two market risk premiums, a forward looking estimate and a long term historic average. The forward looking estimate was based on his opinion of the expected return on the S&P 500, less the risk free rate of 6.1%, which was a projection of future long-term treasury bond yields appearing in the February 2004 edition of *Blue Chip Financial Forecasts.* The expected return was based on the arithmetic average of the real S&P 500 return (the return in excess of the inflation rate) from 1926 to 2002 as reported in *SBBI 2003 Yearbook* plus a consensus analyst inflation projection in the January 1, 2004 edition of the *Blue Chip Financial Forecasts.* (*Id.* at p. 16-17.) The second market risk premium was based on the arithmetic average of the S&P 500 total return for the same period as reported in the same volume, less the total return during that period on long-term treasury bonds. (*Id.*) Mr. Gorman's CAPM results were 9.8%, based on the historic risk premium estimate, and 10.5%, based on the prospective market risk premium. (*Id.*)

Based on his analysis, Mr. Gorman recommended that an appropriate return on equity for Petitioner would be 9.75%. (*Id.* at p. 18.) Mr. Gorman noted that the 9.75% would allow Petitioner to maintain the bond rating of its affiliate, American Water Capital Corporation ("AWCC"). (*Id.* at p. 19.)

Mr. Gorman also criticized Dr. Boquist's application of the DCF model, maintaining that an average stock price (rather than a spot price) should be used to calculate the dividend yield; cash flow growth does not necessarily indicate dividend growth; and analyst forecasts, rather than historical averages, should be used to estimate GDP growth in the second stage. Because of these factors, Mr. Gorman believed Dr. Boquist's two-stage DCF result was inflated. (*Id.* at p. 21.)

Mr. Gorman also disagreed with Dr. Boquist's use of a 1% premium as a small company risk premium. Mr. Gorman noted that Petitioner is not a small, stand alone company but rather a subsidiary of one of the world's largest water and wastewater companies. (*Id.* at p. 22.) Removing the 1% risk premium and high growth rate estimates from Dr. Boquist's DCF model would result in 8.6%. (*Id.*)

Mr. Gorman disagreed with Dr, Boquist's market risk premium estimate in the CAPM analysis. Mr. Gorman supported the use of treasury bond total returns, rather than income returns

as the risk free rate in the CAPM because the income return does not measure the actual return investors earn on treasury bonds. Rather, he stated that total annual returns are based on both dividend yields and price changes to bonds. (*Id.* at p. 23.) He noted that since investors cannot invest only in bond income returns, his own method is more accurate than Dr. Boquist's. (*Id.* at 24.) He also opined that a size adjustment for Petitioner should not be made because of the size of its parent company. He also contended that since Petitioner is a water utility, it is less risky than the companies in Ibbotson's eighth decile size category that Dr. Boquist relied upon. (*Id.* at pp. 24-25.)

Mr. Gorman also disagreed with Dr. Boquist's method of estimating a rate of return on the Petitioner's fair value rate base. He stated that method does not measure what investors require to assume the risk of the underlying investment. (*Id.* at p. 26.)

Intervenor Schererville's witness Sommer expressed the opinion that Petitioner's return on equity should be no greater than 10%. (*Intervenor Schererville's Exhibit 1*, p. 17.) Mr. Sommer reasoned that since Dr. Boquist's recommendation of 11.0% was 50 basis points less than his recommendation in Petitioner's last rate case, the Commission's 10.5% finding in the 2002 Rate Order should now be reduced by 50 basis points. Mr. Sommer asserted that in determining the cost of common equity, the Commission should treat Petitioner as less risky and, therefore, as having a lower cost of capital because of its affiliation with RWE AG, its ultimate parent company, which owns the stock of the largest U.S. regulated water utility holding company. (*Id.* at pp. 14-15.)

Petitioner's Rebuttal. In rebuttal, Dr. Boquist criticized Mr. Kaufman's DCF approach, including his failure to adjust for a full year of forward growth in determining the dividend yield. Dr. Boquist said Mr. Kaufman's half-year forward yield procedure was inconsistent with the mathematical derivation of the model, was theoretically unjustified and would result in the investor perpetually being short one half of the expected dividend growth.

Dr. Boquist disputed Mr. Kaufman's failure to give consideration to the quarterly payment of dividends. He said the ability to receive dividends quarterly has value, which increases the stock price and, thus, decreases the dividend yield calculated by Mr. Kaufman. Dr. Boquist pointed out that in *PSI Energy, Inc.*, Cause No. 40003, the Commission found it to be "inconsistent to use a stock price which reflects quarterly dividends in a model which assumes annual dividend payments unless the model is adjusted to reflect the quarterly dividends which lend to the investor expectations which give rise to the stock price." (Cause No. 40003, p. 29 (Sept. 1996).)

Dr. Boquist also criticized Mr. Kaufman's DCF growth rates. Dr. Boquist said the BVPS was a particularly poor indicator of dividend paying ability. Dr. Boquist opined that a more reasonable approach in this case is to use a two-stage quarterly dividend model and employ forecasted cash flow growth as the first stage. He noted that recent changes in the tax treatment of dividends render the historical data suspect.

Dr. Boquist disagreed with Mr. Kaufman's contention that a forecasted GDP growth rate would be more appropriate in the second stage of the two-stage DCF model. Dr. Boquist stated typical GDP forecasts do not encompass a long-term time frame as required for the second stage.

With respect to the CAPM, Dr. Boquist criticized Mr. Kaufman's use of geometric averages to estimate uncertain forward-looking expected returns. Dr. Boquist stated that Mr. Kaufman misinterpreted the 1982 Ibbotson volume, which did not discuss CAPM; in fact, the book never even mentions the CAPM. Dr. Boquist said the quote relied on by Mr. Kaufman is not inconsistent with specifying the use of the arithmetic average in the CAPM.

Dr. Boquist also said Mr. Kaufman failed to match the bond terms used for the risk-free rate with the twenty-year maturity period represented by the Ibbotson data. Dr. Boquist testified that it was incorrect for Mr. Kaufman to use treasury bond total returns as the risk free rate in the market risk premium calculation because they are affected by changes in value. Only the income return is truly riskless. He disputed Mr. Kaufman's position that the fact that the total return is higher than the income return is inconsistent with the theory for using the income return. Total returns reflect price risk from changes in interest rates. Dr. Boquist said it is only logical that the riskless rate as evidenced by the income return would be lower than the risky rate represented by the total return because investors expect compensation for risk.

Dr. Boquist also challenged Mr. Kaufman's view that the CAPM is more controversial and less reliable than the DCF model. He cited sources concerning reliability problems with the DCF model, including Charles F. Phillips, Jr., *The Regulation of Public Utilities* 395-396 (3rd ed. 1993), which describes a number of "theoretical and practical difficulties" with the DCF model, suggesting a degree of precision that does not exist and leaving wide room for controversy and argument. Dr. Boquist also said that Mr. Kaufman's own recommendation implicitly gives more weight to his CAPM results.

Dr. Boquist said Mr. Kaufman is in error in contending that a small stock premium is inappropriate for a regulated utility. A size adjustment is necessary for all small stocks because a small company will have a cost of common equity greater than that of a larger company with an equivalent beta. He pointed out that the *SBBI 2003 Yearbook*, on page 54, provides an example of the application of the CAPM to a small electric utility company which includes the addition of a size premium.

Dr. Boquist made some of the same comments about Mr. Gorman's testimony, particularly concerning unrealistically low DCF growth rates; a single-stage DCF that does not recognize the quarterly payment of dividends; use in the CAPM of treasury bond total returns instead of the truly riskless income returns; and failure to adjust for size in the CAPM. He also disputed Mr. Gorman's contention that analysts' forecasts should be used to estimate GDP growth in the second stage of his DCF model. Dr. Boquist stated that the second stage does not begin for ten years and then extends into perpetuity. The short term GDP forecasts to which Mr. Gorman refers have no relationship to the second stage time period.

Commission Discussion and Findings. There was considerable disagreement among the parties over the mechanics of the DCF model. First, regarding the calculation of the forward dividend yield in the DCF model, Dr. Boquist chose the full-year method, while Mr. Kaufman and Mr. Gorman utilized the half-year method. Second, regarding the estimation of the perpetual growth rate (g), Dr. Boquist chose the three (3) to five (5) year forecasted growth in cash flow per share for the first stage of his DCF model and the nominal growth rate of GNP for the second stage of his DCF model. Mr. Kaufman relied upon ten (10) year, five (5) year and forecasted

growth rates of dividends, earnings and book value per share. Mr. Gorman relied on five (5) year forecasted growth in EPS. We note that while Mr. Kaufman and Mr. Gorman relied on different estimators of growth for their respective DCF analyses, both estimates of growth had very similar results.

The Commission again reaffirms the positions it took in Petitioner's previous rate case, Cause No. 42029, regarding the growth rate and forward dividend yield, where, on page 31, we quoted from our Order in Cause No. 40103:

> This Commission believes that the DCF remains a viable model to aid in our determinations of Petitioner's cost of equity. As stated in our Final Order in Cause No. 40103 pages 40-41:
>
> The Commission has considerable experience with the DCF model for estimating the cost of equity. We are well aware of the advantages and limitations of the various approaches used by each of the witnesses. For example, the half-year method used by the OUCC for calculating the forward yield is the most frequently used approach in this jurisdiction and is rarely a point of contention in DCF analysis. We believe it fairly represents the dividend payments expected and received by investors, while the full-year method employed by Petitioner overstates dividend yield. A recalculation of Petitioner's DCF using the half-year method by the OUCC resulted in a 20 basis point reduction (Sudhoff direct, p. 29). On the issue of deriving growth rates this Commission has sanctioned the use of per share data for earnings, dividends and book value. *Northern Indiana Fuel and Light*, Cause No. 39145, 25 (IURC, Date Issued January 29, 1992). In all cases however, the Commission expects the parties to exercise sound judgment when deciding which inputs to include as part of their analysis.

Ind.-Am. Water Co., Cause No. 42029, 31 (quoting *1996 Rate Order*, Cause No. 40103, 40-41).

As we stated in Cause No. 40103, the Commission expects the parties to exercise sound judgment when deciding which inputs to include as part of their analysis. This Commission has concerns regarding Dr. Boquist's implementation of the two-stage DCF model. Dr. Boquist has used a high estimate of dividend growth (g) for the second stage of his DCF model. Additionally, Dr. Boquist's quarterly DCF analysis assumes that dividends will grow each and every quarter.

As we have stated before, this Commission continues to believe that both historical and forecasted earnings, dividends and book value per share data are useful when employing the DCF model. We will be skeptical of any DCF analysis that relies solely on one estimator of growth. This is particularly true when the change in growth estimator significantly increases the estimate of growth during a period of declining capital costs. In this case, Dr. Boquist's change from historical growth in dividends per share to forecasted growth in cash flow per share increases his estimate of growth from 2.83% to 7.17% (an increase of over 400 basis points). This "increase" in growth takes place despite the fact capital costs are lower than they were during Petitioner's previous rate case. Again, we disagree with relying on any single estimator to predict growth. We do not believe that investors will focus on any one estimator of growth and

ignore other relevant information. We disagree with relying solely on either forecasted or historical data in a DCF analysis.

Moreover, we are also specifically concerned about Dr. Boquist's use of cash flow per share to estimate growth in a DCF analysis. Depending on the utility's construction budget, changes in cash flow may not lead to changes in dividend growth. In his direct testimony Mr. Eckart stressed most water utilities will need to increase their construction budgets. When construction needs are high, an increase in cash flow may have little impact on dividend growth.

On a more technical basis, there is a mismatch in time periods. Dr. Boquist uses a three (3) to five (5) year forecast for the next ten (10) years. Dr. Boquist could perform a two-stage DCF analysis with the first stage being five (5) years. In addition, Dr. Boquist argues that investors look for cash flow to pay dividends. (*Petitioner's Exhibit JAB-R*, page 5, line 13.) However, retirement of debt and capital spending are also paid out of cash flow. A review of the Value Line Survey from Dr. Boquist's direct testimony reveals that for all three (3) utilities in his proxy group, capital spending per share exceeded cash flow per share. It follows that an increase in cash flow may not lead to an increase in dividends. Finally, a 7.17% near term forecasted growth rate in dividends per share fails any reality test. Analysts are not forecasting that type of growth in dividends for the water industry. The dividend forecasts presented by the other witnesses in this case forecast lower near-term growth in dividends for the water industry.

When determining a common equity cost rate, the Commission has observed the tendency of some cost of capital models to understate the required return, particularly when used in conjunction with an original cost rate base. As the Commission stated in *Indiana Michigan Power Co.*, "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." (Cause No. 38728, 116 PUR4th 1, 17-18 (Indiana Utility Regulatory Commission, Date Issued Aug. 24, 1990). See, *PSI Energy. Inc.*, Cause No. 40003, 27 (Indiana Utility Regulatory Commission, Date Issued Sept. 27, 1996) ("We have indicated our own concerns with heavy reliance on the DCF model."). See also, *S. Ind. Gas and Elec. Co.*, Cause No. 40078, 24 (Indiana Utility Regulatory Commission, Date Issued June 21, 1995) ("...the DCF model, heavily relied on by the Public understates the cost of common equity."). These conclusions are borne out once again in this case and must be recognized.

Even though Mr. Kaufman continues to argue that the DCF model is a more reliable model, it would appear that he recognized the understatement inherent in his DCF model because his ultimate recommendation of 8.75% is more consistent with his CAPM results. Mr. Kaufman's DCF analysis results ranged from 8.52% to 8.57%, while his CAPM results ranged from 7.52% to 9.08%.

We also find some of Mr. Kaufman's criticisms of Dr. Boquist to be overstated. For example, Mr. Kaufman criticizes Dr. Boquist for using forecasted cash flow to establish the growth rate in the first stage in his DCF model on the ground that it is inconsistent with prior cases where Dr. Boquist used historical dividend growth. (*Public's Exhibit 6*, p. 55.) But he fails to acknowledge that Dr. Boquist has used cash flow growth in other cases in the past. (*Petitioner's Exhibit JAB-R*, p. 9.) Similarly, Mr. Kaufman seeks to persuade us that Dr. Boquist's use of a company-specific risk adjustment that is different in amount than in some past

cases is inconsistent. (*Public's Exhibit 6*, pp. 56-57.) Yet, Mr. Kaufman himself switched from making a company-specific risk adjustment in Petitioner's last rate case to making none here. (*Compare, 2002 Rate Order*, Cause No. 42029, p. 33 to *Public's Exhibit 6*, pp. 23, 56. *See also* the description of the OUCC's testimony in *1996 Rate Order*, Cause No., 40103, p. 39 and *1997 Rate Order*, Cause No. 40703, p. 34.)

There was also considerable disagreement regarding the CAPM analysis. The OUCC has relied on both the arithmetic and geometric mean to estimate the market risk premium, while Petitioner relied exclusively on the arithmetic mean premium. Petitioner's reliance on the arithmetic risk premium increases his risk premium by more than 150 basis points over the blended risk premium used by Mr. Kaufman.

In past rate cases this Commission has given weight to both the arithmetic and the geometric mean risk premiums. This position was reaffirmed in our 1996 Rate Order, when we stated "[t]he debate over the proper use of the arithmetic and geometric means is one we consider resolved. As we stated in Indianapolis Water Company, Cause No. 39713-39843, each method has its strengths and weaknesses, and neither is so clearly appropriate as to exclude consideration of the other." (*1996 Rate Order*, Cause No. 40103, p. 41.) Also, in the 2002 Rate Order, we stated "...that, while the debate over the proposed use of the arithmetic and geometric means continues, however, each method has its strengths and weaknesses, neither is so clearly appropriate as to exclude consideration of the other." (*2002 Rate Order*, Cause No. 42029, p. 32.)

Statements from Dr. Ibbotson's 1982 edition of *Stocks, Bonds, Bills, and Inflation: the Past and the Future* support our findings that both methodologies should be given weight. On page 59, Dr. Ibbotson stated as follows:

> The arithmetic mean historical return component is used in making one-year forecasts, since the arithmetic mean represents the average performance over a one-year period. Over a long forecast period, however, the geometric mean historical return represents average performance over the whole period (stated on a compound annual basis). Therefore, we input the arithmetic mean for the one-year forecast, the geometric mean for the twenty-year forecast, and intermediate values for two, three, four, five and ten-year forecasts.

We will continue to give both the geometric and arithmetic mean risk premiums substantial weight. Neither the arithmetic nor geometric mean risk premiums should be excluded in favor of the other.

Another area of disagreement in the CAPM analysis is whether the model should use total returns or income returns. We find Mr. Gorman's analysis in this area to be the most persuasive. The income return on Treasury bonds is simply the average of Treasury bond yield quotes over the historical period, and this yield quote does not measure the actual return investors earn by making investments in Treasury bonds. Investors simply cannot invest only in Treasury bond income returns. Rather, investors must take the risk of variations in bond prices before they invest in treasury bonds. Therefore the actual return experienced by investors in Treasury securities is measured by total return, not simply the income return.

We are also mindful, as was the OUCC in this Cause, of the assertions made by Thames Water and Indiana-American during our investigation in Cause No. 42250 of the effect that American's recent acquisition by Thames Water, a subsidiary of RWE AG, would have on Indiana-American ratepayers. In our Order in Cause No. 42250, we recalled the testimony of James McGivern, Managing Director-Americas of Thames Water, that Indiana-American's rates would not be increased as a result of the acquisition; that, to the contrary, Indiana-American's access to capital at reasonable rates should be enhanced by its affiliation with Thames Water and RWE AG, thereby providing long-term benefits to ratepayers in what is an extremely capital intensive industry.

In its testimony in this Cause, the OUCC quoted Indiana-American's President, Mr. Eckart, as testifying in Cause No. 42250 that American's acquisition by Thames Water would increase Indiana-American's access to capital markets. Our Order in Cause No. 42250 also recognized Mr. Eckart's assertion that Thames Water and RWE AG have strong credit quality and large financial resources that are devoted to their subsidiary utility businesses in general and water and wastewater utility businesses in particular. Our Order in Cause No. 42250, therefore, recognized Mr. Eckart's assertion that Indiana-American's affiliation with Thames Water and RWE AG would enhance Indiana-American's ability to meet its financial requirements.

The OUCC and Intervenors have put forth a number of reasons to disallow risk premiums in the calculations used to determine a cost of equity in this Cause. In particular, we agree with the testimony of the OUCC that Petitioner should not be subjected to a downward adjustment because of its subsidiary or otherwise affiliated relationship with American, Thames Water and RWE AG. Likewise, it would not be appropriate to determine Petitioner's cost of equity by delving into American's, Thames Water's or RWE AG's financial requirements or resources. But it is a reasonable conclusion that the benefits of being associated with such large and obviously credit-worthy companies should offset the company-specific risk adjustments that Petitioner has maintained should be applicable in this Cause. The standard financial models that all parties have relied upon to some extent in this Cause, that are useful in determining Petitioner's cost of equity, are based upon calculation of a number of components, including the inclusion or exclusion of a company-specific risk adjustment. The fact of Petitioner's relationship with a large international water company is a reasonable factor to consider in analyzing the applicability of the company-specific risk adjustment component. To be blind to the fact of Petitioner's relationship with a large international water company, when determining the appropriateness of applying a company-specific risk adjustment component to the standard models used to determine a reasonable cost of equity, would be to ignore reality. In addition, it is disconcerting to this Commission that Petitioner gives no recognition in its models for a rate adjustment in this Cause to the financial benefits that it claimed, in Cause No. 42250, its ratepayers would enjoy as a result of the relationship with a large international water company.

The Petitioner recommended a return of 11.00% on equity capital. However, the foregoing discussion of the evidence indicates that Petitioner's recommendation is too high given current levels of capital costs, prevailing economic conditions and because of adjustments made to Mr. Boquist's raw results to reflect Petitioner's increased level of risk relative to that of the proxy group. Petitioner's unadjusted DCF and CAPM results were 10.0% and 9.59%, respectively. These were then adjusted upward to reflect the alleged special circumstances of the Company and resulted in values of 11% for the DCF and 11.65% for the CAPM. The Public

recommended a return on equity capital of 8.75% based on DCF results of approximately 8.5% and CAPM results ranging from 7.52% to 9.08% with no special adjustments. Mr. Gorman recommended a return of 9.75% based on the results of his DCF and CAPM analysis, while Mr. Sommer recommended a return of no more than 10%.

Our review of the evidence indicates that Petitioner's circumstances, as well as economic conditions, have changed significantly since Indiana-American's last rate case. Petitioner's size has significantly increased; its ability to attract capital has improved as a result of being associated with a large international water company; and the cost of capital is substantially below that which prevailed at the time of the Company's last rate case. Taken together, Petitioner is no more risky than the proxy group companies and is less risky than in the past. Ignoring Petitioner's adjustments to its cost of equity estimates establishes a range of 9.59% to 10.0%.

Overall, the evidence does not support a cost of equity as low as the Public recommended. We recognize that capital costs have declined and that the cost of equity should follow suit. However, we have already opined that unadjusted DCF results can understate the cost of equity, and we are mindful of improved economic conditions which will continue to increase the cost of capital over time.

Based on our discussions above, we find the Petitioner's cost of common equity to be 9.25%. This figure is slightly below Petitioner's unadjusted range of results, but compares favorably to the recommended range of results of both the OUCC and the Intervenors of 8.75% to 10.0%. It affords Petitioner an opportunity to earn a pre-tax interest coverage ratio that will preserve an "A" bond rating, is high enough to compensate Petitioner for any marginal risks it faces and anticipates small but continuous increases in the cost of capital in the future.

B. Cost of Capital and Capital Structure

Having determined the cost of equity, we can now determine Petitioner's cost of capital. When a 9.25% cost of equity is incorporated into Petitioner's capital structure as shown below it produces a weighted cost of capital of 7.17%.

Description	Amount	Percent of Total	Cost Rate	Weighted Cost
Long Term Debt	$ 254,659,452	50.47%	6.86%	3.46%
Common Equity	199,979,016	39.64%	9.25%	3.67%
Preferred Stock	420,000	0.08%	6.00%	0.00%
Post-Retirement Benefits, net	2,815,896	0.56%	0.00%	0.00%
Deferred Income Taxes	43,642,668	8.65%	0.00%	0.00%
Job Development ITC-Post 1970	2,833,994	0.56%	7.91%	0.04%
Deferred ITC-Pre 1971	136,821	0.03%	0.00%	0.00%
Customer Deposits	0	0.00%	6.00%	0.00%
Accumulated Depreciation: Muncie Sewer	43,208	0.01%	0.00%	0.00%
Total	$ 504,531,055	100.00%		7.17%

C. Fair Rate of Return and Net Operating Income

Petitioner's Position. In its case-in-chief, Petitioner proposed to determine its NOI by multiplying its cost of capital by its original cost rate base plus its proposed acquisition adjustments. It is not until page 68 of Petitioner's proposed order that it proposes a single fair rate of return of 6.04% that can be applied to a single fair value rate base of $663,400,000. However, the fair rate of return figure does not appear in Petitioner's direct or rebuttal testimony, thus the origin of this figure is unclear. When a 6.04% fair rate of return is multiplied by the fair value rate base of $663,400,000, it produces a NOI of $40,069,360. The Commission notes that this is virtually the same figure which would be produced by multiplying Petitioner's weighted cost of capital by its original cost rate base plus its proposed acquisition adjustments.

Mr. Cutshaw performed a fair value test that he suggested supported Petitioner's proposed NOI. To derive a fair rate of return, Mr. Cutshaw removed the inflation component that he determined was embedded in Indiana-American's long term bonds. So, Mr. Cutshaw derived a rate of return by reducing the interest rate for each issue by the rate of inflation from the year of issuance to the end of 2002. In his direct testimony, Mr. Cutshaw argued that his methodology is appropriate because it will more accurately determine how much of Indiana-American's debt cost represents compensation for inflation. (Tr. p. G-77-78.) Mr. Cutshaw also cites to various Commission Orders to support his contention that inflation should be removed only from the debt portion of the capital structure. After removing the historical inflation from each debt issuance, Mr. Cutshaw derives an inflation adjusted cost of debt of 4.52%. Mr. Cutshaw then uses the adjusted cost of debt to derive an overall fair rate of return of 6.7%. Finally, Mr. Cutshaw concludes that since the NOI that would be produced from multiplying his fair rate of return by Petitioner's fair value rate base is greater than Petitioner's proposed NOI, Petitioner's proposed NOI is reasonable.

In an additional attempt to support the reasonableness of Petitioner's proposed return, Dr. Boquist presented a comparable return on replacement cost study. Dr. Boquist testified that the return of a utility should correspond to the return investors could earn on investments of comparable risk in the unregulated sector. If investors can earn a larger return and bear identical risks or, conversely, earn identical returns with less risk by investing in other industries, they will do so. Failure to recognize this fact would make it difficult for utilities to raise capital on a competitive basis. Dr. Boquist expressed the opinion that Petitioner should be allowed to earn a fair rate of return on the fair value of its property similar to the rate of return which unregulated companies of comparable risk earn on the fair value of their assets. Dr. Boquist performed a detailed study to determine that rate of return.

Dr. Boquist first identified a large group of comparable-risk, unregulated companies by using the approach advocated by Fama and French in a 1992 study published in the *Journal of Finance* and in subsequent papers. Fama and French concluded that the size of a firm measured by the market value of its equity ("market equity," "ME") and the ratio of a firm's book value of equity to a firm's market value of equity ("book-to-market equity," "BE/ME") are the two risk factors influencing common stock returns because they have strong ties to economic fundamentals, such as profitability and the growth of earnings and assets that have long been associated with investment performance. Fama and French contend these factors explain stock returns better than beta.

Dr. Boquist replicated the Fama and French study approach by performing a computer analysis of non-regulated firms in the New York Stock Exchange, American Stock Exchange and NASDAQ return files from the Center for Research in Security Prices and the merged COMPUSTAT annual industrial files of income statement and balance sheet data. The time period covered by this study extended from 1976 through 2002. The companies were then partitioned into matrixes for each year based upon the two (2) key Fama and French risk factors. Dr. Boquist then developed a portfolio of comparable companies reflecting the range of ME and BE/ME values for his three (3) proxy companies for each year.

Dr. Boquist then determined the pre-tax rate of return earned by the comparable companies on the depreciated replacement cost of their assets. To determine replacement cost, Dr. Boquist used the techniques described in the work of Lindenberg and Ross, published in the *Journal of Business* in 1981, which prescribes a methodology for estimating replacement cost of a firm's assets from its accounting statements. This method considers price level changes, technological change, real economic depreciation and investment in new plant and equipment. The same 1.347% technological change adjustment used by Dr. Boquist in his determination of Petitioner's depreciated replacement cost was used for the comparable companies. Dr. Boquist testified that he measured before income tax operating profit to eliminate the effects of leverage (the interest of which affects income taxes), the tax strategies some firms employ and tax loss carryforwards and carrybacks available to some companies. From this study, Dr. Boquist determined that the average, annual, pre-tax rate of return on replacement cost for the comparable companies from 1976 through 2002 was 10.6%. (*Petitioner's Exhibit JAB*, p. 57.) He concluded that a rate of return of 10.6% before income taxes on the depreciated replacement cost of Petitioner's property, would be fair and reasonable.

OUCC's Position. The Public used a process similar to that of the Petitioner to estimate an appropriate level of NOI for Indiana-American. The key difference is that the Public did not believe it was appropriate for Petitioner to earn a return on its proposed acquisition adjustment from its merger with Northwest. We considered this matter in a prior section of this Order and concluded that the return on the proposed acquisition adjustment for the merger with Northwest should be denied.

OUCC witness Mr. Gassert disputed Mr. Cutshaw's fair value test. Mr. Gassert showed that the methodology Petitioner used in this Cause to determine the fair rate of return was different than the methods Petitioner had employed in its previous cases. Mr. Gassert criticized Mr. Cutshaw's newest method that reduced the interest rate for each debt issue by the rate of inflation from the year of issuance to the end of 2002. Mr. Gassert noted that not only was this method inconsistent with Commission Orders in Petitioner's previous Causes but it was also inconsistent with the method Petitioner used since it began performing this calculation. Mr. Gassert stated that the purpose of removing inflation from the rate of return is not to remove inflation that is embedded in the cost of debt based on the life of the debt, but to remove the inflation for the time period that is embedded in the fair value rate base. Mr. Gassert then stated that it was necessary to try and match the inflation included in the fair value rate base when removing inflation from the cost of capital to determine a fair rate of return. Since all rate base items contain inflation, it is necessary to remove inflation from the entire capital structure and not just the debt component of the capital structure. Mr. Gassert further opined that, if Indiana-American continues to insist that inflation should be removed from only the debt component, the Petitioner should only inflate assets in its fair value rate base funded by debt to eliminate the mismatch created by Indiana-American.

Mr. Gassert noted that the Commission has consistently recognized that inflation is embedded in the overall weighted cost of capital. Mr. Gassert supported his comment with quotes from previous Indiana-American Orders in Cause Nos. 39595, 40103 and 40703. Mr. Gassert noted that in Cause Nos. 40103 and 40703, when inflation was removed from the debt component, the Commission explained that unfortunately it was forced to take a more conservative approach than it may have taken under different evidentiary circumstances because the evidence on inflation was "meager" in those cases. Next, Mr. Gassert applied the Commission's methodology outlined in Petitioner's rate order from Cause No. 39595 to Petitioner's fair value test. Using the Commission's method, Mr. Gassert estimated that the average inflation in Petitioner's rate base ranged from 3.0% to 4.6%. When Mr. Gassert applied the fair rate of return to Petitioner's fair value rate base, Mr. Gassert concluded that if Petitioner had followed a methodology similar to that outlined by the Commission, its fair value test would have resulted in a NOI substantially lower than the Company's requested NOI level. Mr. Gassert explained that in the OUCC's calculation of Petitioner's NOI, the OUCC did not remove inflation from the overall weighted cost of capital. Mr. Gassert further stated that the OUCC's calculation is consistent with the methodology used by the Commission in Cause No. 39595 and concluded that the OUCC's 5.07% fair rate of return when applied to a fair value rate base of $663,437,626 provided Petitioner's shareholders with a fair and reasonable return.

Through its witness Mr. Kaufman, the Public challenged Dr. Boquist's return on replacement cost analysis. Mr. Kaufman had several concerns regarding Dr. Boquist's Fama-

French analysis. In sum, the key concerns expressed by Mr. Kaufman were that Dr. Boquist's return on replacement cost analysis does not react to changes in capital markets, Dr. Boquist's analysis is based on operating returns while the Fama-French analysis is based on market returns and, lastly, the results of Dr. Boquist's analysis are contrary to the model.

Specifically, Mr. Kaufman asserted that Dr. Boquist's return on replacement cost analysis does not react to changes in market conditions. In models such as the DCF or CAPM, changes in investor expectations are quickly incorporated into expected returns. That is not the case in Dr. Boquist's return on replacement cost analysis. For example, a change in interest rates will impact investor expectations, and the results of both a CAPM and DCF analysis will, in turn, quickly react to reflect the change in investor expectations. Mr. Kaufman stated on page 61 of his testimony that "...during 2003 the yield on "A" Utility bonds decreased by approximately 81 basis points and Dr. Boquist's return on replacement cost analysis fails to either react or incorporate the change in interest rates over the last year into his return on replacement cost analysis."

Next, Mr. Kaufman criticized Dr. Boquist's use of operating returns. The Fama-French analysis assumes that firms in the same grid location will earn similar market returns. Market returns refer to price appreciation plus dividends. Dr. Boquist's analysis is based on net operating profit. Dr. Boquist uses operating income before taxes as his measure of return in estimating his return on replacement cost. While Dr. Boquist's analysis assumes that firms in the same grid location will earn similar operating returns, Mr. Kaufman contended that he presents no evidence to support his opinion that the Fama-French analysis can be extended to include his assumption. Mr. Kaufman agreed that there will be some relationship between market returns and operating returns, but he stated that many other factors will influence market returns that may have little or no impact on operating returns. For example, a change in interest rates will typically have an immediate impact on the market return of a company, but that change in interest rates may not have the same impact on current operating returns. According to Mr. Kaufman, a firm's financial leverage will impact its markets returns, yet Dr. Boquist's analysis specifically intends to remove the impact of financial leverage, as the Petitioner's witness stated on page 54 of his direct testimony, "I sought to obtain a measure of operating earnings of the comparable company group unaffected by leverage (the interest from which affects income taxes)."

Mr. Kaufman asserted that operating returns and market returns are distinct. Companies may have similar market returns, yet have very different operating returns. According to the OUCC, if Dr. Boquist chooses to assert that firms in the same Fama-French grid location will also have similar operating returns in addition to similar market returns, then it is his responsibility to demonstrate that this is the case. Given the lack of support that Dr. Boquist provides in his testimony which demonstrates that the Fama-French analysis can also be applied to operating returns, Mr. Kaufman claimed that such an assumption is not reasonable. Mr. Kaufman asserted, as an example, that in 1999 HJ Heinz Co. had a market return of -27.3%, yet Dr. Boquist estimated an operating return on replacement cost of 21.1%. (*Public's Exhibit 6*, pp. 62-63.)

Mr. Kaufman stated that the results of Dr. Boquist's return on replacement cost analysis produced results that were contrary to the model's predicted results. The Fama-French model

predicts that 1) smaller companies will earn a higher rate of return than larger companies and 2) companies with a higher book-to-market ratio will earn a higher rate of return than companies with a lower book-to-market ratio[3]. In his work papers, Dr. Boquist provides a calculation of returns by grid location for each of the 25 grid locations on his 5 by 5 grid. He does this on a year-by-year basis for each year from 1976-2002 and on a composite basis for all years. Mr. Kaufman provided a schedule that replicates the composite or average results of Dr. Boquist's analysis for all years. (*Public's Exhibit 6, Sched. 4,* p. 3.) Mr. Kaufman also included a copy of Petitioner's work paper that contains the data provided in Schedule 4, page 3. (*Id.* at p. 4.) In his analysis Dr. Boquist separates the companies into quintiles, as measured by market equity, which get larger going left to right (grid locations 1 to 5). Companies are also separated into quintiles as measured by book-to-market ratio with an increasing book-to-market ratio going from top to bottom (grid locations 1 to 5). Thus, companies in grid location (1,1), located in the upper left hand corner, have the smallest market equity and the lowest book-to-market ratio. Conversely, companies in grid location (5,5), located in the lower right hand corner, have the largest market equity and have the highest book-to-market ratio. Under the Fama-French model smaller companies should earn higher rates of return than larger companies, therefore rates of return should increase as one moves horizontally from grid 5 to 1 (right to left). Likewise, under the Fama-French model, where firms with a lower book-to-market ratio should earn lower rates of returns, rates of return should increase as one moves vertically from grid 1 to grid 5 (top to bottom).

Mr. Kaufman then asserted that the figures in Dr. Boquist's analysis did not follow the theory put forth by the Fama-French model. Mr. Kaufman stated that grid location (5,1) located in the upper right hand corner, which contains the largest companies with the smallest book-to-market ratio, shows the highest rate of return (18.04%) when, in fact, the theory dictates it should have the lowest rate of return. According to Mr. Kaufman, under the Fama-French model, the highest rate of return should appear in grid location (1,5) which contains the smallest companies with the highest book-to-market ratio. But, under Dr. Boquist's analysis, grid location (1,5) has one of the lowest rates of return (2.24%).

Additionally, Mr. Kaufman compared the final results of Dr. Boquist's analysis in Cause No. 42029 to the results in a previous Indiana-American rate case, Cause No. 41320. This comparison caused Mr. Kaufman to question the validity of the study's results. According to Mr. Kaufman, although both he and Dr. Boquist disagreed on Indiana-American's cost of equity in Cause No. 42029, both of them estimated a cost of equity in that case that was similar to what each witness estimated in Cause No. 41320. Mr. Kaufman asserted that, despite this fact, Dr. Boquist's estimated return on replacement cost had increased from 7.58% in Petitioner's Cause No. 41320 to 11.88% in Cause No. 42029. According to Mr. Kaufman, between Petitioner's Orders in Cause Nos. 42029 and 41320, Dr. Boquist had increased his estimate of Petitioner's cost of equity by 25 basis points[4] and increased his estimated fair rate of return by 430 basis

[3] According to the Fama-French model, a firm's book-to-market ratio is a measure of financial distress. Firms with a high book-to-market ratio (a low market-to-book ratio) are financially distressed and require a higher rate of return.

[4] Dr. Boquist recommended an 11.5% cost of equity in Cause No. 42029 and an 11.25% cost of equity in Cause No. 41320.

points. Mr. Kaufman stated that Dr. Boquist did not explain this dramatic increase in his estimated return on replacement cost during a period where capital costs have remained relatively stable.

Finally, Mr. Kaufman testified that Dr. Boquist performed no review or analysis of his results to test the validity of his study. For example, in his analysis there are approximately 26,375 return on replacement cost estimates from 1990-2002. This sample has an average return of 5.13% and a standard deviation of 28.69%. According to Mr. Kaufman, such a high standard deviation raised concerns, in addition to the concerns he stated previously, and should not be ignored. In his opinion, Dr. Boquist had not demonstrated the validity of his analysis.

Petitioner's Rebuttal. OUCC witness Gassert proposed deducting the average annual inflation rates since 1926 or 1963 from Petitioner's entire cost of capital. Mr. Cutshaw testified in rebuttal that his method is more accurate than Mr. Gassert's because it accounts for the fact that the inflation of concern to the debt investor is the inflation that will occur during the time the debt is outstanding. Mr. Gassert's inflation deduction lacks this correlation because Petitioner's debt has been outstanding for periods much shorter than those used by Mr. Gassert and during a period when inflation was lower than the long-term averages used by Mr. Gassert. Mr. Cutshaw testified that Mr. Gassert's method of deducting inflation from all components of the capital structure is inconsistent with the 1996, 1997 and 2002 Rate Orders. For example, in the 2002 Rate Order the Commission stated that, "[T]his Commission has asserted in previous rate cases that, since the fair value rate base contains inflation that . . . is historic and not prospective inflation, it should be removed from the debt component of the cost of capital to estimate a fair rate of return." (*2002 Rate Order*, Cause No. 42029, p. 39.) Mr. Cutshaw said that Mr. Gassert's proposal created negative cost rates for some capital structure components and resulted in an unreasonable and illogical net operating income when applied to the OUCC's proposed cost of capital.

Mr. Cutshaw argued that Mr. Gassert's proposed methodology produced NOIs that were too low to be credible because it produced a NOI that was below the NOI that would be derived based on original cost rate making. By adjusting for historic inflation in the embedded cost of debt, Mr. Cutshaw also claimed that his own methodology of deducting from each debt issuance the average inflation rate during the period that the issue has been outstanding is better than Mr. Gassert's method. Finally, Mr. Cutshaw maintained that Mr. Gassert's position that inflation should be deducted from all components of the cost of capital is not consistent with prior Commission orders.

In his rebuttal testimony, Dr. Boquist testified that his study was consistent with the Fama-French model. He said Fama-French have employed a 5 by 5 grid in their analysis. Dr. Boquist testified operating returns are a necessary component of fair value ratemaking and are correlated to market returns. Dr. Boquist also argued that the results of his analysis were consistent with the theory of the Fama-French model and that it would be expected for small companies to show relatively lower contemporaneous returns on fair value since the denominator is larger even though small companies generate higher average stock market returns (i.e., dividend and stock price increases) than do large companies. He said his study is company-specific, pointing out that there is no difference in the level of specificity in the study and in Mr.

Kaufman's CAPM results. He also said higher rates of return on replacement costs are to be expected during periods of strong economic growth.

Commission Discussion and Findings. The cost of capital is a percentage which can be converted into an earnings requirement only by applying that percentage to a rate base. In *Duquesne Light Co. v. Barasch,* the United States Supreme Court held that the U.S. Constitution does not require "the adoption of a single theory of valuation.... The Constitution within broad limits leaves the States free to decide what rate setting methodology best meets their needs in balancing the interests of the utility and the public." (488 U.S. 299, 316 (1989).) Indiana has selected the fair value rate base methodology. The Supreme Court described the fair value approach as follows:

> Under the fair value approach, a "company is entitled to ask . . . a fair return upon the value of that which it employs for the public convenience," while on the other hand, "the public is entitled to demand . . . that no more be exacted from it for the use of [utility property] than the services rendered by it are reasonably worth. [*Smyth v. Ames,*] 169 U.S. 466, 547 [(1898)]. In theory the *Smyth v. Ames* fair value standard mimics the operation of the competitive market. To the extent utilities' investments in plants are good ones (because their benefits exceed their costs) they are rewarded with an opportunity to earn an "above-cost" return, that is, a fair return on the current "market value" of the plant. To the extent utilities' investments turn out to be bad ones (such as plants that are canceled and so never used and useful to the public), the utilities suffer because the investments have no fair value and so justify no return.

Duquesne Light Co., pp. 308-309. As previously discussed, the Indiana fair value rule is a significant factor in treating the acquisition adjustments at issue in this case. In light of the findings made above, including how the purchase prices served to bring the property to its present state of efficiency and the cost savings that investment made possible, Petitioner should be allowed a return on the net amount of the Indiana Cities acquisition adjustment through fair value ratemaking.

As we did in our 2002 Rate Order, we will use the following standards and criteria to determine a fair rate of return on Petitioner's investment in its utility plant:

1) Return comparable to return on investments in other enterprises having corresponding risks;

2) Return sufficient to ensure confidence in the financial integrity of the Petitioner;

3) Return sufficient to maintain and support the Petitioner's credit [rating];

4) Return sufficient to attract capital as reasonably required by the Petitioner in its utility business.

2002 Rate Order, Cause No. 42029, p. 38. One recognized method for evaluating the reasonableness of a utility's allowed return involves investigation of the utility's capital structure. From such investigation, we can develop the overall weighted cost of capital. This

cost of capital may then be considered in determining a fair return. Having previously determined that the fair value of Petitioner's rate base is $663,400,000, it is now our duty to determine a fair rate of return that can be used to calculate a fair dollar return for Petitioner's net operating income.

It is clear that because the cost of capital and the fair value rate base are derived in different manners the two may not be directly applied to each other. If the fair value rate base is found to be other than the original cost rate base, determining return by multiplying the cost of capital including a consideration for inflation by a fair value rate base, which also includes inflation, would overstate the required return. This overstatement would reflect a redundant consideration of the anticipated impact of inflation on the value of Petitioner's property.

As the Supreme Court of Indiana determined in *Public Service Commission v. City of Indianapolis*,

> The ratemaking process involves a balancing of all these factors and probably others. It involves a balancing of the owner's or investor's interest with the consumer's interest. On the one hand, the rates may not be so low as to confiscate the investor's interest or property. On the other hand, the rates may not be so high as to injure the consumer by charging an exorbitant price for service and at the same time giving the utility owner an unreasonable or excessive profit.

235 Ind. at p. 96, 131 N.E.2d at p. 318. Therefore, the results of any return computation may be tempered by the Commission's duty to balance the respective interests involved in ratemaking. Finally, the end result of this Commission's Orders must be measured as much by the success with which they protect the broad public interest entrusted to our protection as by the effectiveness with which they maintain credit and attract capital.

This Commission has asserted in previous rate cases, insofar as the fair value rate base contains historic inflation, that it is historic inflation and not prospective inflation that should be removed from the cost of capital to estimate a fair rate of return. For example, in the 1996 Rate Order, we explained that "[i]n order to avoid over-compensating Petitioner for the effects of historical inflation, it is necessary to remove the historical inflation component from the costs of capital to derive a fair return." (*1996 Rate Order*, Cause No. 40103, p. 48.) In addition, this Commission determined in *Indiana Michigan Power Company* that

> It is inappropriate to apply to the fair value of Petitioner's used and useful property its weighted cost of capital because the weighted cost of capital contains both historic and prospective inflationary factors. We have accounted for the historic inflationary factors in determining the fair value of Petitioner's property. Therefore, to arrive at a fair return to be applied to the fair value of Petitioner's property the <u>historic inflationary</u> considerations must be removed, lest they be double counted. (emphasis added).

Ind. Mich. Power Co., Cause No. 38728 (1990), p. 28.

On page 21 of his testimony, Mr. Gassert recommended rates of inflation from 3.0% to 4.6% and a fair value range of 3.27% to 4.87%, using the methodology in Cause No. 39595. Mr. Gassert ultimately recommends a fair return of 5.07%. However, Mr. Gassert removed his inflation values from Petitioner's proposed cost of capital of 7.87%. Applying the methodology from Cause No. 39595 to the OUCC's proposed cost of capital of 6.97% and our finding of 7.17% results in ranges of 2.37% to 3.97% and 2.57% to 4.17%, respectively. The use of the Cause No. 39595 methodology in this case yields results that are too low when compared to the OUCC's ultimate recommendation. Petitioner's recommended fair value return appears to be 6.04%. Based on the results of the parties' analyses and their recommendations, we find a range for fair value return to be 5.0% to 6.0%. Based on the evidence, we find 5.38% to be a fair rate of return, and should be approved. When applied to the $663,400,00 fair value rate base, a required NOI level of approximately $35,669,628 is produced. This should adequately compensate Petitioner for the purchase price paid to acquire Indiana Cities.

XI. OPERATING RESULTS UNDER PRESENT RATES

A. Revenues

Petitioner's proposed pro forma annual revenues at present rates originally totaled $135,646,024, and were increased to $137,740,829 on rebuttal. The OUCC's proposed pro forma revenues at present rates equaled $139,532,714. The differences are described and reconciled hereinafter. The resolution of these issues will also have a corresponding impact on certain expenses which vary with the quantity of water delivered and revenues received.

1. Residential Usage Normalization

Petitioner's Position. Petitioner proposed to adjust test year revenues to reflect the normalization of residential customer usage. A usage normalization adjustment would account for potential unusual or unseasonable conditions during the test year which might impact the demand for water. It is derived by comparing the test year usage to some other benchmark over an historical period.

In direct testimony, Bruce I. Tapp, Jr., a Financial Analyst for Indiana-American, conducted a regression analysis in which he examined the trend in consumption over time. He used time as the independent variable and average residential water usage per month as the dependent variable. In conducting this analysis, Mr. Tapp used data from the last nine and one half (9½) years (114 months). (*Petitioner's Exhibit BIT*, pp. 7-10.)

In performing his analysis, Mr. Tapp compared actual test year average residential usage to the model's predicted usage during the test year. As part of his analysis Mr. Tapp used a method he called the Classical Decomposition Multiplicative Model ("CDMM"). The CDMM adjusted residential usage data for seasonality so that it could be used in a regression analysis. (*Id.*)

Based on his analysis, Mr. Tapp concluded that average residential usage was declining. He concluded that actual usage during the test year exceeded his expected/projected usage.

Therefore, Mr. Tapp reduced test-year revenues by $1,734,221 to correct the discrepancy between the actual test-year data and his projected data for the same time period. (*Id.*)

Mr. Tapp testified the Commission had used simple, historical averages in the past, rather than a regression analysis. In explaining his departure from previously employed methodologies, he stated that his methodology using a regression analysis was superior to either a three (3) year average or a five (5) year average because his regression analysis had a mean absolute deviation ("MAD") of .196, while a five-year average and a three-year average had MADs of .221 and .256, respectively. In other words, the average monthly difference or "error" between the actual, historical data and the projected (or averaged) data was lowest (best) for Mr. Tapp's regression analysis and highest (worst) for a three-year average. The MAD for a five-year historical average was in between the MAD for the three-year average and the regression analysis. (*Id.*)

OUCC's Position. The OUCC recommended this Commission make no adjustment to test-year data for usage normalization. The OUCC's witness Edward Kaufman presented testimony disputing the reliability of Mr. Tapp's analysis. (*Public's Exhibit 6*, pp. 70-76.)

Specifically, Mr. Kaufman criticized Mr. Tapp's analysis because Mr. Tapp did not calculate the R^2 value for his regression analysis. Mr. Kaufman explained, "R^2 is the proportion of the total variation in Y explained by the regression of Y on X. Or in layman's terms the R^2 explains the percentage change in the dependent variable (in Mr. Tapp's analysis, water usage) that is explained by the change in the independent variable (in Mr. Tapp's analysis, time [monthly basis])." (*Id.* at p. 71-72.)

Mr. Kaufman explained that calculating the R^2 is an easy way to test the reliability of a regression analysis. Specifically, he noted in his testimony that Mr. Tapp's analysis was performed as a Microsoft Excel document, and Excel gives users the option of having the R^2 of an analysis automatically calculated. (*Id.*)

Mr. Kaufman testified that Mr. Tapp's regression analysis had an R^2 of only .0511 before correcting for autocorrelation (discussed below). Mr. Kaufman explained that this R^2 showed that only 5.11% of the change in average customer usage was explained by the passage time. Mr. Kaufman concluded that an R^2 of only 0.0511 was too low to make a reliable conclusion between time and its impact on water usage. (*Id.*)

In addition, Mr. Kaufman criticized Mr. Tapp's analysis because Mr. Tapp did not correct his results for a statistical bias called "autocorrelation." Mr. Kaufman explained that autocorrelation exists where there is a relationship or correlation between the values of a time series and previous values in the same series. The result is the appearance of a stronger relationship between the dependent and independent variables than actually exists. Mr. Kaufman pointed out that correcting for autocorrelation showed the 5.11% relationship between time and usage shown by Mr. Tapp's analysis was actually overstated. (*Id.* at p. 72, line 7 though p. 73, line 6.)

Mr. Kaufman further disputed Mr. Tapp's analysis by noting Mr. Tapp failed to account for changes in Indiana-American's customer base. Specifically, Mr. Kaufman divided Mr.

Tapp's data into two (2) samples: one prior to the merger with Northwest and United (January 1994 – December 1999) and a second after the merger with Northwest and United (January 2000 – June 2003), and then recalculated Mr. Tapp's regression analysis for the post-merger data. Mr. Kaufman testified that this analysis, using only the post-merger data, shows that average residential monthly usage is increasing and not decreasing. (*Id.* at p. 74, line 13 through p. 75, line 3.)

Mr. Kaufman's testimony included a series of eight (8) graphs that illustrated the low R^2 in Mr. Tapp's analysis and the impact of dividing Mr. Tapp's data into two (2) samples. (*Public's Exhibit 6, Sched. 6.*) Finally, Mr. Kaufman asserted that a MAD, or average error, of 196 gallons per month was so high that it rendered Mr. Tapp's analysis and his subsequent conclusions meaningless. Mr. Kaufman observed that this average monthly error (196 gal.) was nearly as high as Mr. Tapp's entire projected decrease over 9½ years (203 gallons per month). (*Public's Exhibit 6*, p. 75, line 9 through p. 76, line 15.)

Based on Mr. Kaufman's analysis and his criticism of Mr. Tapp's analysis, the OUCC recommended that no adjustment be made based on residential usage.

Petitioner's Rebuttal. In rebuttal, Petitioner's witness, Mr. Cutshaw stated Petitioner would no longer rely on Mr. Tapp's regression analysis, due to "the complexity of the issues that have been raised by Mr. Kaufman[.]" (*Petitioner's Exhibit JLC-R,* p. 5, lines 14-16.) Instead, Mr. Cutshaw offered a new usage normalization adjustment, calculated by comparing a three-year historical average to actual test year data. This change in methodology reduced Petitioner's proposed revenue adjustment from $1.73 million to $1.2 million.

OUCC's Response to Three-Year Average. The Presiding Officers permitted the OUCC to present live testimony at the end of the hearing to respond to Petitioner's new usage normalization adjustment and corresponding new revenue adjustment. The OUCC continued to recommend that the Commission make no revenue adjustment, due to the unreliability of both of Petitioner's proposed methodologies.

The OUCC presented the live testimonies of Edward Kaufman and Utility Analyst Judith I. Gemmecke. Mr. Kaufman reminded the Commission that Petitioner's justification for using a three-year average instead of a five-year average in Cause No. 42029 was that average residential monthly usage was declining at that time. However, Mr. Kaufman reiterated the point from his direct testimony that according to Petitioner's data, average monthly residential usage over the last three and one half (3½) years is in fact increasing, not decreasing. Consequently, the OUCC testified that using an adjustment based on a three-year average was inappropriate. (Tr. pp. H-73–74.)

Mr. Kaufman stated that using a five-year historical average was more appropriate than using Petitioner's three-year average. Mr. Kaufman noted that using Petitioner's proposed three-year average resulted in a downward adjustment to test-year revenues of $1,193,000, while using a five-year average resulted in an upward adjustment to test-year revenues of $214,000. (Tr. p. H-74.)

Mr. Kaufman stated that a five-year average had a lower MAD than the three-year average advocated by Mr. Cutshaw. (Tr. p. H-75.) Mr. Kaufman observed that the three-year average's higher error rate indicated less reliability. (*Id.*) However, Mr. Kaufman stated that the spread of results from all three (3) methodologies (three-year average, five-year average, and regression analysis) demonstrated that estimating average customer usage is imprecise at best. (Tr. pp. H-76-77.) Therefore, Mr. Kaufman concluded that all three (3) methods were unreliable and that none of them should be used. (*Id.*)

Public's witness Ms. Gemmecke also provided live and filed testimony. (Tr. p. H-79-85; *Public's Exhibit 1-A, 1-B, 1-C,* and *1-D.*) In her testimony submitted at the hearing, she claimed that Petitioner has not been consistent in a methodology to determine usage normalization. (*Public's Exhibit 1-D.*) For example, in Cause No. 42029, the Commission allowed Petitioner to use a three-year historical usage average because, in that case, the three-year precipitation average more closely approximated the precipitation average for the previous thirty (30) years. (*Id.*; Tr. p. H-84.)

Ms. Gemmecke testified that in this case, however, the five-year precipitation average more closely approximated the thirty-year precipitation average than did Petitioner's proposed three-year average. Consequently, there was no justification for Petitioner's use of a three-year average. Ms. Gemmecke provided a chart and data to support her position that the five-year average is in fact closer to the thirty-year average than is the three-year average. (*Id.*)

Next, Ms. Gemmecke explained the difference between "weather normalization" and "usage normalization." She explained there are many factors that influence usage other than weather. In response to Petitioner's claim that water conservation has reduced customer usage Ms. Gemmecke explained that there are several other factors that could increase usage. (*Id.*)

Finally, Ms. Gemmecke reiterated the OUCC's position that no usage normalization adjustment was appropriate in this case. However, she stated that, if the Commission felt a usage adjustment was absolutely necessary, the five-year average was superior to the three-year method recommended by Petitioner. (*Id.*)

Petitioner's Rebuttal to Live Testimony. Petitioner's witness Duane Cole provided live rebuttal testimony in response to the Public's live testimony. Mr. Cole claimed that Ms. Gemmecke's analysis of rainfall was irrelevant because her analysis was based upon the entire State of Indiana rather than particular locations where Petitioner serves. He asserted that it is not uncommon in any given month for rainfall amounts within the State of Indiana to vary by as much as ten (10) inches. (Tr. p. H-87.)

Mr. Cole also submitted an analysis of consumption during winter months. (*See Petitioner's Exhibit DDCole-R*; Tr. pp. H-90-93.) He asserted that by analyzing consumption during winter months, many variables of water consumption are removed. (Tr. pp. H-89-90.) Mr. Cole testified that his schedule is consistent with his opinion that the effect of increased conservation efforts is driving base consumption per customer down. (Tr. pp. H-93-94.) Mr. Cole asserted that with declining base consumption per customer, the use of a longer average would drive consumption up to artificially high levels. (*Id.*)

Commission Discussion and Findings. Petitioner, in this case, advocates use of a three-year average for adjusting revenues for residential usage, while the OUCC recommends no usage normalization adjustment. However, during the course of this proceeding, the Commission has been presented with three (3) possible methodologies for adjusting test year revenues based on customer usage. First, Petitioner proposed a $1.73 million decrease to test-year revenues based on a regression analysis. Second, Petitioner proposed a $1.2 million decrease to test-year revenues based on a three-year average of historical usage. Finally, in the event this Commission felt an adjustment was necessary, the OUCC calculated a $214,567 *increase* to test-year revenues based on a five-year average of historical usage. We will address each of these methodologies in turn.

At the close of evidence, Petitioner was no longer relying on Mr. Tapp's regression analysis, nor was Petitioner advocating use of the resulting $1.73 million revenue adjustment. Consequently, we see no reason to accept Mr. Tapp's conclusions, including his proposed revenue adjustment. Furthermore, we find the R^2 of .0511, indicating only a 5.11% relationship between the dependent variable (average monthly usage) and the independent variable (time), insufficient to satisfy Petitioner's burden of proving an adjustment is warranted. In addition, we are troubled by the error rate (MAD) of 196 gallons per month. This seems excessive, given Mr. Tapp's conclusion that residential usage has decreased by only 203 gallons per month over nearly a ten-year period.

However, while we do not accept Mr. Tapp's methodology or proposed revenue adjustment, we cannot ignore portions of Mr. Tapp's testimony which were uncontested and upon which other witnesses relied. Specifically, both the OUCC and Petitioner ultimately repudiated Mr. Tapp's regression analysis, but both the OUCC and Petitioner continued to rely on Mr. Tapp's underlying data. In addition, the MADs Mr. Tapp calculated for each of the three (3) methodologies at issue in this Cause were not part of Mr. Tapp's regression analysis itself and were based on uncontested data.

This brings us to the adjustments based on three-year and five-year averages performed by Mr. Cutshaw and the OUCC, respectively. The error rates expressed as MADs for both the three-year and the five-year averages exceed the error rate for Mr. Tapp's regression analysis. Further, the average error (MAD) for Mr. Cutshaw's three-year average exceeds the average error (MAD) for the five-year average calculated by the OUCC. Consequently, we find the five-year average the more compelling of the two (2) methodologies. However, because both methodologies have higher MADs than Mr. Tapp's regression analysis, which all parties to this Cause have rejected as unreliable, we cannot accept a usage normalization adjustment based on any of these methodologies.

In addition to the above deficiencies in all three proposed methodologies, we have particular concerns about Petitioner's reliance on a three-year historical average. Specifically, we find that Petitioner's justification for reliance on a three-year average inconsistent with this Commission's reasoning in Cause No. 42029. In addition, we find Mr. Cole's testimony and exhibits in support of Petitioner's three-year average troubling in a number of respects.

First, as to our findings in Cause No. 42029, we stated that using a three-year average for a residential usage normalization adjustment was appropriate in that case for the following reason:

> Because weather during the three-year period approximates the thirty-year average, the use of the three-year period appropriately captures this most significant variable for which the usage normalization is an attempt to adjust. We therefore find that Petitioner's proposed three-year average for purposes of usage normalization is appropriate.

2002 Rate Order, Cause No. 42029, p. 41.

However, in this case, only OUCC's witness Gemmecke testified and presented evidence for the record comparing a three-year or five-year average to the thirty-year weather average. She presented data showing that the five-year average more closely matched the thirty-year precipitation average for Indiana than did Petitioner's proposed three-year average. Petitioner provided no historical weather data.

Further, in Cause No. 42029, Mr. Cole testified on behalf of Petitioner in support of using a three-year average. He justified this approach by stating that consumption was declining over time in Indiana-American's service territory. As a result, Mr. Cole argued that limiting historical data to a three-year period was appropriate. We summarized his reasoning as follows:

> [Mr. Cole] explained that usage normalization based upon longer historical averages will overstate revenues since the recent trend in base consumption reflects a more severe decline. If an adjustment is to be made at all, Mr. Cole explained that the period over which the average is to be computed should be shorter rather than longer to avoid including years where the base consumption per customer is higher than it is anticipated to be again, thus overstating normal usage.

Id. at p. 40.

However, in this case usage is not decreasing, according to Mr. Kaufman's testimony. As Mr. Kaufman's testimony and attached schedules show, customer usage in Indiana-American's service territory did decrease from 1994 to 1999, but consumption has actually been *increasing* since Indiana-American's merger with Northwest and United in January of 2000. (*Public's Exhibit 6, Sched. No. 6*, pp. 4-8.) Indeed, if consumption is decreasing over time, as Petitioner contends, it is unclear why the test year, which is the third and final year of Mr. Cutshaw's three-year historical period, is *higher* than the three-year average.

Second, as to Mr. Cole's testimony, we are troubled both by Mr. Cole's general arguments as well as by discrepancies between Mr. Cole's Exhibit DDCole and data submitted in Petitioner's direct testimony.

In live testimony, Mr. Cole attempted to show that residential usage was decreasing over time. In support of this position, Mr. Cole offered Petitioner's Exhibit DDCole, which was a

chart showing consumption during "winter" months (November through March) from 1994 to 2003. However, in presenting data demonstrating a downward trend in consumption, Mr. Cole eliminated all summer months from his review. As he acknowledged on cross-examination, in doing so he did not take into account any trends in consumption that may have taken place during summer months. (Tr. p. H-96.)

We cannot accept an analysis that ignores seven (7) months of the year, rather than attempting to explain inconsistent data. This is especially true in this case, where the OUCC's evidence shows contrary data regarding both consumption and historical weather data.

Even more perplexing, however, are discrepancies between data contained in Mr. Cole's Exhibit DDCole and data on which Mr. Cutshaw relied in generating his three-year average. Below is a chart that reproduces the format, but not the values, of Exhibit DDCole as admitted into evidence during Mr. Cole's live testimony. (*See* Tr. p. H-90.) The values contained in this chart are values we obtained from Petitioner's Exhibit BIT-4, attached to the Direct Testimony of Bruce I. Tapp, and upon which Messrs. Tapp, Kaufman and Cutshaw all relied in performing their analyses. If Mr. Cole had utilized the values used by Messrs. Tapp, Kaufman and Cutshaw in performing their analyses, Exhibit DDCole would appear as follows:

Winter Residential Analysis
Using Data from Petitioner's Exhibit BIT-4, Sched. 1

	JAN	FEB	MAR	APR-OCT	NOV	DEC	Winter Total
1994					5.456	5.358	
1995	5.719	5.374	5.077		5.456	5.416	26.984
1996	5.487	5.529	5.330		5.259	5.217	27.218
1997	5.577	5.541	5.053		5.592	5.126	26.647
1998	5.450	5.200	4.928		5.385	5.052	26.296
1999	5.521	5.218	4.976		5.201	5.078	26.143
2000	**5.401**	**5.327**	**4.871**		**5.015**	**5.101**	25.878
2001	5.393	5.253	4.814		4.535	**5.091**	25.576
2002	4.793	4.978	4.539		**4.916**	**5.068**	23.936
2003	5.767	6.169	5.335				27.255

This chart contains the data which Mr. Cutshaw used to calculate his three-year average. However, only the numbers highlighted in bold match the data contained in Mr. Cole's Exhibit DDCole, which Mr. Cole used in live testimony to justify using Mr. Cutshaw's three-year average. It appears, therefore, that Mr. Cutshaw relied on different data to calculate his three-year average than Mr. Cole used to support the three-year average.

Both Mr. Cutshaw's analysis and Mr. Tapp's analysis are based on the same data contained on Document No. 000029 from Book 2 of Petitioner's Minimum Standard Filing Requirements, which was admitted as Public's Exhibit CX-1 in this proceeding. Further, Mr. Cutshaw agreed (to within $100) to the OUCC's calculation of a five-year average based on this

same data. (Tr. p. G-88-89.) However, Mr. Cole's Exhibit DDCole is based on almost entirely different data, the origins of which are unknown to this Commission.

We are concerned about this discrepancy. At no time in his live, oral testimony did Mr. Cole indicate the data in Exhibit DDCole was any different from that on which the other witnesses relied. Similarly, Mr. Cole offered no analysis or explanation as to the source of this data or what impact this data would have if used in either a three-year or five-year average.

Furthermore, we are concerned about the impact of this inconsistent data on the evidence before us. We note that initially Mr. Cole relied on a "visual review" of the trend in the column of Exhibit DDCole titled "Winter Total" to show that usage was decreasing over time. (Tr. p. H-92-93.) However, a "visual review" of the chart above, using Mr. Cutshaw's and Mr. Tapp's data, shows a less clear and less substantial trend, if any. Conversely, if Mr. Cutshaw had used Mr. Cole's data, which was substantially lower during the winter months of the test year than Mr. Cutshaw's and Mr. Tapp's, Mr. Cutshaw's calculations would have yielded a smaller revenue adjustment in favor of Petitioner, assuming all other data remained unchanged.

In conclusion, we find that no usage normalization adjustment is appropriate in this case. Petitioner proposed a $1.2 million adjustment to revenues based on Mr. Cutshaw's three-year historical average of residential consumption. However, we believe this methodology is not appropriate under the facts of this case. Specifically, Petitioner offered no evidence to establish that weather patterns over the three-year period are in any way comparable to thirty-year averages. In addition, the OUCC, through the testimony of Mr. Kaufman, demonstrated that residential consumption is increasing rather than decreasing. Petitioner attempted to contradict this conclusion through the live testimony of Mr. Cole, but the data on which Mr. Cole relied in attempting to show a decreasing trend in consumption was inconsistent with the data Mr. Cutshaw used to calculate Petitioner's revenue adjustment. No explanation was offered for this discrepancy.

2. Customer Growth

Petitioner's Position. Petitioner's witness Tapp proposed an increase in test year revenues to reflect an increase in Petitioner's residential and commercial customers. *(Petitioner's Exhibit BIT-2, Sched. 1.)* Mr. Tapp calculated his adjustment by determining the change in the number of residential and commercial customers for each of the months from July 2002 through December 2003 and multiplying that change by Petitioner's meter charge. Mr. Tapp also accounted for six (6) months of service charges to the test year for residential and commercial irrigation meters. (*Petitioner's Exhibit BIT*, p. 6, lines 12-18.) Mr. Tapp determined the change in customers for each month and then annualized for the number of months for which the service charge was not accounted for in the test year bill analysis. (*Id.* at lines 18-20.) Mr. Tapp testified his methodology was consistent with the methodology accepted by this Commission in Cause Nos. 39595, 40103, 40703 and 42029. Finally, Mr. Tapp determined the impact of the increased number of residential customers from the Turkey Creek and Westwood acquisitions. This adjustment was determined using the difference between the projected normalized or forecasted usage and actual usage of the customers acquired. Mr. Tapp calculated a projected test year usage for these customers by calculating an average forecasted use from the

residential customers in the district that the acquired customers would be served. Mr. Tapp then multiplied the projected usage through Petitioner's rate blocks.

Mr. Tapp testified that his customer accounting expense adjustment calculated the average cost per bill and multiplied that cost by the number of additional bills related to his customer growth adjustments and his adjustments associated with the additional customers added from the Turkey Creek and Westwood acquisitions. (*Id.* at p. 22, lines 15-20.)

Mr. Tapp also made corresponding adjustments to purchased power, purchased water, and chemical expenses. (*Id.* at pp. 15-21.)

OUCC's Position. OUCC witness Dana Lynn accepted the Petitioner's adjustments to annualize service charges for commercial customer growth that occurred during the test year. However, Ms. Lynn did not accept such an adjustment for residential customer growth.

Instead, the OUCC proposed that Petitioner's residential customer growth adjustment should be calculated for each district by taking the average test year bill by district and multiplying that average by the annualized increase in the number of test year bills. Ms. Lynn calculated the additional revenue expected by district from residential customers added to the system during the test year. She computed an average sales volume for residential customers by district based on test year data. (*Public's Exhibit 3, Attach. DML-7.*) Ms. Lynn testified that her adjustment normalized the growth of Petitioner's residential customer base on a per-bill basis. (*Public's Exhibit 3*, p. 26, lines 22-24.)

The OUCC also adjusted certain operational costs associated with its proposed adjustment. Ms. Lynn stated that a customer accounting adjustment was not needed because Petitioner had already performed the adjustment that would account for the increased bills. (*Id.* at 27, lines 9-10.)

Petitioner's Rebuttal. Petitioner's witness James Cutshaw testified that Ms. Lynn's methodology for calculating the residential customer growth adjustment was unreliable. Mr. Cutshaw noted that Ms. Lynn's use of annualized sales volumes was a methodology the Commission had rejected as not fixed, known and measurable. (*Petitioner's Exhibit JLC-R*, p. 7, lines 15-17.) Mr. Cutshaw claimed Ms. Lynn offered no explanation for why her use of annualized sales volumes was fixed, known and measurable. (*Id.* at p. 8, lines 11-12.) Mr. Cutshaw contrasted Ms. Lynn's proposed methodology with the proposed methodology used by Mr. Tapp to adjust for customer growth. (*Id.* at p. 7, lines 15-17.)

Mr. Cutshaw also identified three (3) other problems with the customer growth adjustment proposed by Ms. Lynn. First, Mr. Cutshaw testified that Ms. Lynn's adjustment only accounted for changes in customers through the end of the test year (June 2003), whereas Mr. Tapp adjusted for changes through the rate base cutoff. Second, Mr. Cutshaw testified that Mr. Tapp's methodology more accurately accounted for additional revenues from the customers added by the Turkey Creek and Westwood acquisitions because the Company prepared a specific calculation for each individual customer based upon their actual usage history since acquisition. (*Id.* at p. 9, lines 19-20.) Ms. Lynn, on the other hand, used average bills for the entire

Northwest and West Lafayette operations, respectively. Finally, Mr. Cutshaw explained that Ms. Lynn included a full year's worth of bills for customers with separate irrigation meter services. (*Id.* at p. 9, lines 21-23.) Mr. Cutshaw testified that such customers typically only activate their irrigation service during six (6) months of the year and that Ms. Lynn's assumptions, therefore, resulted in an inflated allocation of sales revenue to irrigation customers.

Mr. Cutshaw presented a reconciliation of the differences between Ms. Lynn's adjustment and the Company's for residential customer growth:

	Petitioner	**OUCC**	**Difference between Petitioner and OUCC**
Customer Growth	$ 393,836	$ 610,832	
Turkey Creek/Westwood	196,629	(included in above)	
Sales-for-Resale		18,725	
	$ 590,465	$ 629,557	$ 39,092

Petitioner's Exhibit JLC-R2.

Mr. Custshaw also criticized the OUCC's methodology used to calculate the adjustments to purchased water, purchased power and chemical expense stating that the proper criteria to use is the change in water sales rather than the change in customers. Lastly, Mr. Cutshaw noted an error in the OUCC's calculation due to incorrect customer numbers. (*Petitioner's Exhibit JLC-R*, pp. 20-24.)

Commission Discussion and Findings. Petitioner complained that a usage adjustment based on an average monthly bill of a customer is not a fixed, known and measurable indication that total usage would increase. However, the Public cited Cause No. 38868 where Petitioner applied the same methodology the Public used in this Cause.

Further, that Petitioner experienced residential customer growth during the test year is undisputed, and this Commission can reasonably expect that this growth will place additional demands on Petitioner's system, resulting in an increase of total water usage. In fact, Petitioner has used the same method the Public used when Petitioner made its revenue adjustments for the customers added as a result of the Turkey Creek and Westwood acquisitions.

Mr. Cutshaw claimed Mr. Tapp's methodology accounted for additional revenues from customers added by the Turkey Creek and Westwood acquisitions based upon each customer's actual usage history since acquisition. However, after a review of Mr. Tapp's testimony, we find that Mr. Cutshaw's representations about Mr. Tapp's calculation are incorrect.

In fact Mr. Tapp used projected data for test year usage of residential customers in each of the entire districts that now serve the Westwood and Turkey Creek acquisitions. Mr. Tapp relied on his CDMM to forecast test year data for the entire districts that serve Westwood and Turkey Creek and used the results of the district forecast (i.e. Northwest and West Lafayette) for test year usage instead of the actual historical usage from the time Westwood and Turkey Creek were acquired by Indiana-American. Thus, Mr. Cutshaw's claim, that Petitioner's method to

account for additional revenues from the customers added from Westwood and Turkey Creek are based on actual usage history since the acquisition, is erroneous.

When discussing the Turkey Creek acquisition in his prefiled testimony, Mr. Tapp explained that projected usage was determined *using normalized usage for the Northwest operation.* (*Petitioner's Exhibit BIT*, p. 13, lines 13-14 (emphasis added).) With the exception of the forecasted step in Mr. Tapp's calculation, Mr. Tapp's and Ms. Lynn's methods are essentially the same. The only difference is that Petitioner used projected *usage,* while the Public used projected *sales.* We see no substantive difference. Further, the Public has consistently applied this method in other cases. For example, in Cause No. 42481, the Public applied this methodology and we found that the Public's adjustments for customer growth were fixed, known, and measurable. (*Morgan Cty. Rural Water Corp.*, Cause No. 42481, 9 (Indiana Utility Regulatory Commission, Date Issued March 31, 2004).) We make the same finding here.

Petitioner raised two (2) additional concerns. First, the Petitioner asserted that the Public did not update its customer growth adjustment through the rate base cutoff. While this is a practice that we have accepted in some past cases, it is not a requirement. Second, the Petitioner claimed that the Public has included a full year's worth of bills for customers with separate sprinkler (irrigation) meter services. However, it appears that if the Public has done this, then so has Petitioner. Ms. Lynn testified that Petitioner had already increased test year expenses for the increased bills based on test year customer growth, thus making no adjustment. If the number of bills the Public projected was different than the number of bills Petitioner projected, then the Public and Petitioner would not have been in agreement on the appropriate customer accounting adjustment, because Petitioner's customer accounting adjustment is also based on projected number of bills. (See *Petitioner's Exhibit BIT*, p. 22, lines 15-20.) However, the OUCC and Petitioner did agree on the customer accounting adjustment, which demonstrates they both relied on the same number of projected bills. (*Public's Exhibit 3*, p. 27, lines 6-10.)

We accept Public's adjustment for changes resulting from residential customer growth and so reject the Petitioner's proposal to exclude Public's customer growth adjustment. We find the Public has adequately demonstrated that customer growth existed during the test year and that total usage will increase; accordingly, the pro forma revenue increase of $610,832 is approved. Regarding corresponding adjustments to operating expenses, we agree with Petitioner's criticism of the OUCC's calculation of the adjustment to purchased water, purchased power, and chemical expense. After taking Petitioner's criticisms into account, the pro forma customer growth increase is $2,290 for purchased water expense; $21,253 for purchased power expense; and $3,375 for chemical expense.

3. Changes in Large Customer Consumption

Petitioner's Position. Petitioner's witness Tapp identified several large customers who, for a variety of reasons, have changed their consumption patterns either during or subsequent to the test year. The total of all such customers resulted in a proposed adjustment to reduce test year revenues by $183,665. (*Petitioner's Exhibit BIT-2, Sched. 1.*, line 22) Mr. Tapp also proposed corresponding adjustments to purchased power, purchased water and chemical expense.

OUCC's Position. OUCC witness Lynn accepted Petitioner's adjustment except for $18,572 associated with Seymour Tubing. She believed that Petitioner's data does not indicate this customer's consumption has materially decreased during the test year, and that Petitioner's support does not warrant a permanent reduction in consumption from Seymour Tubing. (*Public's Exhibit 3*, p. 28, lines 2-10.) OUCC Utility Analyst Margaret A. Stull also proposed corresponding adjustments to purchased power and chemical expense. However, Ms. Stull objected to Petitioner's proposed purchased water adjustment associated with Seelyville and the new penitentiary, on the grounds these customers would not impact purchased water. (*Public's Exhibit 2*, p. 12, lines 5 - 13.)

Petitioner's Rebuttal. Petitioner agreed that Seelyville and the penitentiary would not impact purchased water. With respect to Seymour Tubing, Mr. Tapp testified in Petitioner's case-in-chief that the adjustment is derived from the customer's implementation of water conservation measures and reduced production from levels to which the customer does not anticipate returning. In rebuttal, Petitioner's witness Cutshaw disagreed with Ms. Lynn's comments that Seymour Tubing's consumption is not decreasing. Mr. Cutshaw testified that he reviewed Seymour Tubing's usage for the most recent twelve (12) month period (69,605 CCF), and noted that this is less than Mr. Tapp's projected consumption rate (70,415 CCF). (*Petitioner's Exhibit JLC-R*, p. 5, lines 5-8.) He testified that the Company's adjustment of $18,572 is amply supported and should be utilized in the determination of pro forma revenues.

Commission Discussion and Findings. We accept Petitioner's adjustment for changes in large customer consumption and so reject the OUCC's proposal to exclude the adjustment for Seymour Tubing. We find that Petitioner has adequately demonstrated that Seymour Tubing has decreased its consumption below the test year level; accordingly, the pro forma revenues should reflect the adjustment as proposed by Petitioner. Accordingly, we also find that Petitioner's pro forma adjustments to purchased power and chemical expense should be accepted, though the pro forma adjustment to purchased water should be rejected.

B. Operating Expenses

1. Pro Forma Labor Positions

Petitioner proposed a pro forma adjustment to labor expense in excess of test year labor expenses. Petitioner's witness Cutshaw characterized these extra labor costs as the inclusion of anticipated salary and incentives and anticipated hours of current employees as well as current vacancies and new positions. Most of this upward adjustment in costs was effected through increases to "management fees" Petitioner pays to its affiliates. However, to the extent these management fee adjustments are truly adjustments to Labor Expenses, we address them here. We will discuss each area of labor expense below.

a) Vacant Positions

Petitioner's Position. Petitioner's proposed pro forma adjustment to labor expense included funding for twelve (12) positions which were vacant at the end of the test year (June 30, 2003).

OUCC's Position. OUCC witness Gemmecke testified that Petitioner was seeking an increase of $2,082,496 (13.82% increase) over test year salaries. She testified Petitioner was seeking "full-employment," or inclusion of expense for a full year of salary for employees who only worked part of the year, just as it did in its last rate case (Cause No. 42029). She stated Petitioner was also requesting positions held open during the last four (4) years be funded by its customers. She claimed Petitioner has twelve (12) positions which were not filled as of June 30, 2003, and were still vacant as of January 6, 2004. In addition, five (5) of those twelve (12) positions had been unfilled since before June 30, 2002.

Ms. Gemmecke proposed to reduce Petitioner's pro forma labor expense by excluding the costs of the twelve (12) positions that were vacant during the test year. She stated that each of the positions was vacant or became vacant during the period of August 2000 through June 2003 and remained vacant as of January 6, 2004. (*Public's Exhibit 1*, p. 18.) Further, according to Petitioner's responses to Town of Schererville's data request Q 1.14 (attached as Attachment JIG-2 to Ms. Gemmecke's testimony), each of these positions had been vacant anywhere from six (6) months to three (3) years, as of January 6, 2004. (*Public's Exhibit 1, Attach. JIG-2.*)

Petitioner's Rebuttal. Petitioner, through the testimony of Mr. Cutshaw, agreed to the OUCC's proposed elimination of two (2) of the twelve (12) vacant positions, which are two (2) corporate level employees whose leave dates were May 2003 and June 2003. (*Petitioner's Exhibit JLC-R*, p. 14, lines 1-3.) However, Petitioner's witnesses Duane Cole and James Cutshaw both testified on rebuttal that ten (10) of the positions should remain in labor expense. They argued that three (3) of these ten (10) positions had been filled, and that the Company was actively recruiting for the seven (7) remaining positions. (*Id.* at p. 13, lines 19-23; *Petitioner's Exhibit DDC-R*, pp. 8-10.)

Commission Discussion and Findings. Petitioner has agreed to the OUCC's reduction for two (2) of the twelve (12) vacant positions. Consequently, we remove the costs of "Operations Engineer" and "Financial Analyst" positions, shown at the bottom of Petitioner's Exhibit JIG, Attachment JIG-2, p. 3, from Petitioner's pro forma labor expense. Petitioner has filled three (3) of the remaining ten (10) "vacant" positions with persons hired from outside the company. (*Petitioner's Exhibit DDC-R2*, pp. 1, 17, 20.) Consequently, we allow Petitioner's pro forma adjustment as to these three (3) positions. However, we reject Petitioner's pro forma adjustment for the remaining seven (7) vacant positions. Each of these seven (7) positions is either still vacant or was filled by simply shifting employees from other positions within the company.

Of the seven (7) positions we exclude from Petitioner's pro forma labor expense, two (2) were filled with in-house transfers, thereby leaving two (2) other positions newly vacant. If we were to find these in-house transfers alone were sufficient evidence to support Petitioner's adjustment to test-year expenses, it would open the door to potential double-counting of Petitioner's employees.

As to the remaining five (5) positions at issue, we cannot accept that these positions are necessary for providing utility service, given the length of time they were vacant. The most recently vacated of these positions was March 1, 2003, and it remains vacant. Of these five (5) positions, the position that has remained vacant the longest was vacated on October 26, 2001,

and it remains vacant. While Petitioner's officers have authorized the filling of these positions, the timing and circumstances of these authorizations are suspect.

Specifically, we are troubled by the circumstances under which the ten (10) contested, vacant positions were authorized to be filled. The Commission was made aware through cross-examination of Mr. Cole regarding Exhibit DDC-R2, that the vast majority (eight (8) of ten (10)) of these vacancies were requested to be filled on January 12, 2004, which was the day before Petitioner's Evidentiary Hearing. (Tr. p. E-97-99.) Further, seven (7) of the ten (10) vacancy requests were approved by Mr. Cole and Mr. Eckart on January 13, 2004, the day of the Evidentiary Hearing. Four (4) of the five (5) currently unfilled positions were approved by Mr. Cole on the morning of his testimony. The fifth became vacant on August 31, 2002, but was never requested to be filled until April 5, 2004.

In addition, a review of Petitioner's Exhibit DDC-R2, which is composed of the Job Posting Requests for these vacant positions, shows that nearly all of the "Requested by" and "Manager" signatures were electronic signatures or approvals obtained by telephone. This fact, taken with the fact Mr. Cole approved the requests hours before he was to give sworn testimony in this case, gives an impression that Petitioner rushed to approve hiring for these positions expressly for the purposes of this rate case. The fact that these positions were vacant for such long periods of time (most of them for more than a year) supports this conclusion.

Based on the foregoing, we will allow in rates full annual salaries for the following positions:

District	Vacant Name	Title	Last Held	Request to Fill	Agreed to Fill	Vacancy Filled
John. Co.	Meter Reader	Meter Reader	6/23/2003	1/12/2004	1/13/2004	2/9/2004
Kokomo	Rinker	Utility Specialist	5/31/2003	1/12/2004	1/13/2004	3/22/2004
~~Wabash Valley~~ Mooresville	Jackson, DE	Utility Tech	8/11/2000	1/12/2004	1/20/2004	3/23/2004

Based on the foregoing, we will not allow in rates salaries for the following positions:

District	Vacant Name	Title	Last Held	Request to Fill	Agreed to fill	Vacancy Filled
Warsaw	Dorell AP	F.S.	8/31/2002	4/5/2004	4/5/2004	No
N.W.	Furlow	Field Service	10/4/2002	1/12/2004	1/13/2004	No
N.W.	Townsend R	FSR	3/1/2003	1/12/2004	1/13/2004	No
Corporate	Nitza	Engineer	5/23/2003			
Corporate	Norris, K	unknown	6/6/2003			
Corporate	Maintenance	Maintenance	10/26/2001	1/12/2004	1/13/2004	No
So. Ind.	Satterwhite	Operator	7/6/2001			transfer
John. Co.	Fitter	Fitter	2/28/2002	1/12/2004	1/13/2004	transfer
N.W.	Hamilton	Field Service	3/14/2002	1/12/2004	1/13/2004	No

b) New Positions

Petitioner's Position. Petitioner's case-in-chief appeared to involve no increase to Labor Expense for new positions. In fact, Petitioner appeared to be proposing a $1,096,516 decrease to Labor Expense as a result of the elimination of the Customer Service Center in Richmond, Indiana. (*Petitioner's Exhibit WJW*, p. 7.) However, as Petitioner's witness Wolf explained, these expenses were added to the cost Petitioner is billed from its affiliated management company, AWWSC. (*Id.*)

OUCC's Position. OUCC witness Gemmecke testified that Petitioner was seeking an increase of $2,082,496 (13.82% increase) over test year salaries. However, this increase did not appear as an increase to "Labor Expense" because Petitioner was seeking to shift some of these labor costs from Indiana-American to AWWSC, which would then bill Indiana-American "management fees" for those labor expenses. Ms. Gemmecke discussed these pro forma increases as "Labor Expenses," rather than under the heading of "Management Fees." (*Public's Exhibit 1*, p. 4, lines 5-11.)

Ms. Gemmecke testified Petitioner's adjustment to test-year labor expense included the addition of fifteen (15) new positions, including four (4) additional customer service representatives, three (3) dispatchers, six (6) closers, a team leader and a supervisor. (*Id.* at p. 19, lines 4-13.) However, she observed that none of Petitioner's witnesses in Direct Testimony offers an explanation why these positions, above test year expense, were necessary. (*Id.* at lines 20-22.) Consequently, Ms. Gemmecke reduced Petitioner's increase to labor expense by $388,949 for the fifteen (15) additional positions.

Ms. Gemmecke explained that Petitioner had proposed that all of these positions should be paid through management fees in the future. However, she further testified that she had asked Mr. Cutshaw during an on-site visit why AWWSC needed to hire fifteen (15) additional personnel. Mr. Cutshaw informed her that, with the move of Customer Service Center personnel to Alton, Illinois, AWWSC would need to hire local people to handle those functions. (*Id.* at lines 14-18.)

Ms. Gemmecke noted that the Richmond, Indiana Customer Service Center was already performing these functions prior to the move to the Illinois center. (*Id.* at line 19.) Consequently, Ms. Gemmecke concluded that the need to add fifteen (15) positions, in addition to moving customer service operations to Illinois, appeared to contradict Mr. Cole's testimony that centralizing customer service functions would allow Petitioner to take advantage of economies of scale. (*Id.* at p. 19, line 23 through p. 20, line 2.)

Petitioner's Rebuttal. Mr. Cole presented rebuttal testimony opposing Ms. Gemmecke's proposed exclusion of eleven (11) of the new customer service employees. Specifically, he explained the functions of the three (3) dispatchers, six (6) closers, one (1) team leader and one (1) supervisor. He testified that these are positions that are currently being filled. The dispatchers dispatch time critical orders that come from the Alton Customer Satisfaction Center plus perform other duties. Closers have been hired so that all work orders can be closed by the next morning after the work is completed. The team leader and supervisor are already in place. Mr. Cole testified that these positions are not being eliminated as a part of the move to the

Alton Customer Satisfaction Center. Mr. Cole also stated that Petitioner did not increase its number of customer service representatives in Richmond by four (4). (*Petitioner's Exhibit DDC-R*, pp. 6-7.)

Commission Discussion and Findings. With respect to the three (3) dispatchers, six (6) closers, a team leader and a supervisor, none of Petitioner's witnesses, including Mr. Cole, rebutted Ms. Gemmecke's assertion that the functions of these eleven (11) positions had been performed during the test year and costs associated with the performance of this work was already included in the test year expenses. Petitioner bears the burden of proof when advocating expenses in excess of test year, and Petitioner has not met that burden of proof for these eleven (11) positions. The duties carried out by these "new" position titles were the same duties carried out by other personnel during the test year. Consequently, the costs of performing these functions are already included in test year expenses. Permitting Petitioner to adjust test-year expenses for these new positions would result in double-recovery.

Costs related to the four (4) customer service representatives are also denied and are considered within our discussion and findings below regarding the Customer Satisfaction Center. Consequently, we reduce Petitioner's pro forma labor expense by $388,949 for the elimination of these fifteen (15) positions.

c) Wabash District Position

OUCC's Position. The OUCC proposed to eliminate one position in the Wabash District which was double-counted.

Petitioner's Rebuttal. Petitioner agreed that one position had been double counted. Consequently, Petitioner agreed with the removal of $48,262 from Labor Expense.

Commission Discussion and Findings. We find the elimination of $48,262 appropriate.

Commission Discussion and Findings Regarding Labor Expense. For the above reasons, the Commission finds pro forma labor expense, before "shifting" a portion of those costs to management fees, is $16,424,456 or $1,353,835 over the test year. After shifting the labor expenses for customer service and a portion of corporate to management fees, the pro forma direct labor expense is $14,329,245.

2. Incentive Pay Program

Petitioner's Position. Petitioner did not propose a separate adjustment for incentive pay. Instead, Petitioner calculated labor expense to include incentive pay at the percentage of each eligible employee's expensed labor.

OUCC's Position. Ms. Gemmecke proposed to remove all of Petitioner's Annual Incentive Plan ("AIP") from Petitioner's operations and management expense. She summarized her reasons for disallowing this expense as follows:

- The entire variable pay plan can be withheld by the Board if minimum financial goals are not met.

- A large portion of the AIP compensation is based upon financial goals.

- The Merit Pay Plan already encompasses incentives for excellence in performance for the same employees eligible for the AIP.

- A generous pay and benefits plan already exists without the AIP compensation to attract and retain qualified employees.

Public's Exhibit 1, p. 5, line 14 through p. 6, line 2.

Ms. Gemmecke further testified that the requested level of net operating income of $40,071,000 in this case would be short of the required financial goal of $44,982,000 for 2003. (*Id.* at p. 8, lines 6-14; *Public's Exhibit 1, Attach. JIG-15*, p. 2, resp. to Q-283.) Consequently, Petitioner would not need the funds to pay for the incentive payment. Further, she testified that while Petitioner was authorized incentive pay in the last rate case of $411,000, Petitioner had only paid $133,369 in incentive pay as of the date the OUCC prefiled its case-in-chief.

She criticized the calculation of Petitioner's proposed incentive pay for 1) being calculated after the April 2004 Merit Pay increase and 2) being calculated on positions rather than actual eligible employees. Ms. Gemmecke broke down the incentive pay as the portion related to financial goals (56% of total AIP), operational goals (27% of total AIP) and individual goals (17% of total AIP).

Ms. Gemmecke also stated that Petitioner's benefit package is generous. Petitioner has a merit pay incentive which covers the same employees as the AIP covers, and the OUCC has not opposed the merit pay increase. Ms. Gemmecke points out that Petitioner does not keep records on employee turnover which is necessary to determine the extent the incentive compensation has had on retaining employees. She stated the OUCC's position that each element of the incentive compensation (financial, operational, and individual) be paid by the shareholders and not the ratepayers.

Petitioner's Rebuttal. Mr. Eckart responded to many of Ms. Gemmecke's criticisms. (*Petitioner's Exhibit JEE-R*, pp. 2-16.) He explained the basic aspects of the Company's incentive pay program and employee eligibility for the program.

All full-time management, professional and technical employees who are employed as of December 31 or who retire during the plan year may be eligible to receive incentive pay, subject to three "performance" components of the program: financial, operational and individual. The financial component is based upon achieving targeted operating results and net debt. The operational component is based upon achieving targeted results in the areas of customer satisfaction, environmental compliance and health and safety. Lastly, the individual component is based upon the individual employee's performance. Mr. Eckart admitted that the Board does have the discretion to withhold the financial component based upon failure to reach minimum

financial performance; however, he testified that failure to achieve financial goals could not result in the withholding of the other components. (*Id.* at pp. 2-5.)

Mr. Eckart further argued that Petitioner could potentially earn sufficient revenue to meet the requisite financial goals to satisfy the "financial" component of the incentive pay program, noting that the required "operating result" is not synonymous with the "net operating income" granted by this Commission. He explained how the company could yield a higher operating result than the net operating income requested in this case. (*Id.* at pp. 8-9.)

Mr. Eckart responded to Ms. Gemmecke's testimony concerning the portion of incentive pay which is funded by shareholders. He stated that 87% of the annual incentive pay is allocated to operation and maintenance expense. The balance is not capitalized. Thus, Mr. Eckert argued Petitioner's proposal would result in responsibility for financing incentive pay to be split between shareholders and customers. (*Id.* at pp. 15-16.)

Mr. Eckart also disputed Ms. Gemmecke's description of Petitioner's AIP benefits as "very generous." (*Id.* at p. 13.) He disputed Ms. Gemmecke's position that the AIP only benefits Petitioner's stockholders, stating why he believes a financially strong company is to the benefit of both the stockholder and the customer. (*Id.* at pp. 14-15.) In addition, Mr. Eckart testified that an incentive plan payment was made for the plan year 2003 in excess of $500,000. (*Id.* at p. 16.)

Mr. Cutshaw argued that incentive pay should be calculated based on positions in pro forma labor expense rather than persons actually employed during the test year. He opined that all expenses, including incentive pay and other labor-related expenses associated with positions included in pro forma labor expense, should be recovered. (*Petitioner's Exhibit JLC-R,* p. 12-13.)

Commission Discussion and Findings. In the 2002 Rate Order, we approved Petitioner's recovery of a portion of its annual incentive pay. We found significant two (2) criteria by which the recovery of incentive pay is to be judged: (1) a pure profit-sharing plan, which only incents employees to become more profitable is more appropriate for funding solely by the shareholders than a plan which also ties compensation levels to better service to the customers; and (2) a plan which causes compensation to exceed levels which are reasonably necessary for the utility to attract its workforce should be disallowed as an unnecessary expense. In addition, we found it significant that Petitioner's plan was funded only in part through rates.

As we review Petitioner's incentive plan, we find these criteria are still satisfied. Petitioner's plan is not a pure profit-sharing plan. Rather, significant components of annual incentive pay are derived solely from operational goals, which relate to customer service, environmental compliance, and health and safety, and from individual goals which are based upon the individual employee's performance. Furthermore, Mr. Eckart demonstrated that Petitioner's incentive program does not cause total compensation to exceed levels which are reasonably necessary to attract the workforce. To the contrary, the at-risk component of pay is necessary for Petitioner's employees to receive the average pay commanded in the marketplace. The only evidence offered to the contrary related to the all-encompassing Bureau of Labor Statistics information, which is not tailored to Petitioner's workforce including degreed, licensed and highly trained people. Mr. Eckart further demonstrated that Petitioner's compensation

package is well within the mainstream for that offered in the industry. Finally, Mr. Eckart demonstrated that a portion of the plan is proposed to be funded through rates, and a portion proposed to be funded by shareholders. Accordingly, as we found in Cause No. 42029, we find that Petitioner's incentive pay should be recoverable through rates, and we reject Ms. Gemmecke's and Ms. Stull's proposed adjustment.

3. Pension Expense

Petitioner's Position. Petitioner proposed an adjustment to test year pension expense which converts to the use of the Financial Accounting Standard Board's Statement of Financial Accounting Standards No. 87 ("FAS87"). Previously, Petitioner has reflected pension expense based upon the contribution to the pension trust fund required under the Employee Retirement Income Security Act ("ERISA"). The difference between the two (2) methodologies is that FAS87 is essentially a current year estimate of pension costs being accrued for currently employed, eligible employees and existing retirees. The ERISA method fluctuates based upon the value of the investments in the pension trust fund, and is therefore more directly influenced by short-term fluctuations of the financial markets. Petitioner's witness Wolf explained that the FAS87 level is a long-term measure that is relatively stable from year to year, while the ERISA contribution level is a short-term measure that may fluctuate significantly from year to year. Mr. Wolf testified that the conversion to the FAS87 expense method accomplishes two (2) important objectives: (1) less fluctuation in cost and resulting impact to the company and its rates for service, and (2) minimizing the impact of the increase in pension cost in this case since the pro forma expense is $132,000 less than what the pro forma amount would be if the ERISA method were used.

There are two components to Petitioner's proposed adjustment to reflect the change from ERISA to FAS87. First, the Company proposes to amortize the deferred pension assets accumulated under the ERISA method over ten (10) years. Second, the adjustment reflects an increase in the pro forma FAS87 expense over the test year ERISA contribution level. The pro forma FAS87 level was calculated based upon a six (6) year average of Petitioner's projected FAS87 expense for the years 2003 to 2008. The projection for this period was prepared by Towers Perrin, one of the world's largest global management consulting and actuarial firms. The total adjustment to test year expense, including both the average pro forma level and the amortization of the deferred amount is $1,686,130. (*Petitioner's Exhibit WJW-1, Sched. 2.*)

OUCC's Position. The OUCC did not oppose Petitioner's proposed conversion to FAS87, the amortization of the deferred amount or the computation of the pro forma level of FAS87 expense. The OUCC's proposed pension expense adjustment is identical to Petitioner's. (*Public's Exhibit 1, OUCC Sched. 4*, p. 1.) OUCC witness Gemmecke's testimony as initially prefiled specifically agreed with Petitioner's proposed adjustment. (*Public's Exhibit 1*, p. 24.) Ms. Gemmecke excluded this testimony from the version which was actually offered and received into evidence at the evidentiary hearing; nevertheless, she testified that she personally prepared her testimony as it was originally prefiled and was careful to assure that it accurately reflected her opinions. (Tr. p. D-18-19.) Given that the OUCC included Petitioner's proposed pension expense adjustment in its schedules, we are left to conclude that the OUCC has no objection to Petitioner's request.

Intervenors' Positions. Both the Industrial Group and the Town of Schererville opposed Petitioner's proposed pension expense adjustment. Mr. Gorman noted that the ERISA pension expense reflects the minimum annual cash contribution the Petitioner normally makes to the pension trust fund. He explained that the FAS87 pension expense is an accrual expense recorded on a company's financial statements. (*Industrial Group's Exhibit 1*, p. 27.) Mr. Gorman disputed Mr. Wolf's contention that the FAS87 pension expense is more stable. He noted that Petitioner's FAS87 pension expense was a negative amount in the calendar years 2000 and 2001 compared to the $1.8 million positive expense accrual projected for the test year. (*Id.* at p. 28.) Mr. Gorman also noted that Petitioner's test year pension expense was based on a 2002 actuarial study which assumed that the long-term return on the trust fund assets would be 9%. According to Mr. Gorman, the 2002 projected return understates the actual return on stock investments during 2003. He provided an example that the S&P 500 has increased over 35% from January 2003 to January 2004. Consequently, he concluded that this increase in the value of the trust fund assets will lower the Petitioner's FAS87 pension expense when it is updated in 2004. Therefore, Mr. Gorman opined that the support for Petitioner's requested pension expense under FAS87 for the test year is already stale and probably overstates what the Petitioner's pension expense will be when the study is updated. (*Id.* at 29.) Mr. Gorman recommended that the Commission be consistent with its past ratemaking treatment of pension expense by continuing to use the ERISA pension expense method and allow Petitioner to include $677,000 as pension expense, which was the amount incurred for the test year.

Intervenor Town of Schererville offered the evidence of its witness Sommer who divided the $2.2 million adjustment increase into its three (3) components: losses, change in methodology and retired Northwest Indiana executives. The evidence thereafter offered by witness Sommer was a rejection of all three components. Witness Sommer rejected the recovery of the loss component of the $2.2 million pension adjustment, equaling $471,897 per year. The basis for witness Sommer's rejection of this pension loss recovery can be summarized as an objection to charging Petitioner's ratepayers who lost their own pension funds; the likelihood that with market changes, Petitioner will actually over-collect on these losses; and a belief that good regulatory policy is not served by such recovery. Witness Sommer's rejection of the change in methodology component of this $2.2 million increase is a rejection of $1,683,288. Witness Sommer's rejection can be summarized as being based on calculations which are wrong and, thus, not fixed, known and measurable. Finally, witness Sommer rejected the recovery of the third component, equaling $34,236, relating to retired former executives of Northwest Indiana, which is part of Petitioner's acquisition of Northwest Indiana.

Petitioner's Rebuttal. Mr. Wolf first disputed Mr. Gorman's testimony on the relative volatility of FAS87 and ERISA for purposes of computing annual pension expense. He introduced an exhibit which shows the ERISA level goes from zero for the year 2001 to in excess of $4 million for the year 2005 and then down to $1.3 million for 2008. (*Petitioner's Exhibit WJW-R2.*) During the same time period, the FAS87 cost fluctuates from $0.6 million in 2001 to a lower peak of $2.4 million in 2004. The overall average of ERISA from 2003 to 2008 is much higher at $2.6 million per year as compared to the $1.9 million average for FAS87 in those same years.

He also disputed Mr. Gorman's opinions based upon recent market gains. It is the use of FAS87 which is intended to mitigate the effects of short-term fluctuations in capital markets. As

a result, he testified that short-term unrealized investment gains or losses will not have a significant impact from one year to the next on the valuation but will have an average impact over longer periods of time. (*Petitioner's Exhibit WJW-R,* p. 10.)

Mr. Wolf further stated that Mr. Sommer is not relying on the correct information for purposes of his criticisms of the salary increase rate assumed by Towers Perrin in its valuation. He testified that a simple comparison to recent actual labor cost changes on a Company-wide basis is an apples-to-oranges comparison. Mr. Wolf testified that selection of the salary increase rate assumption for actuarial valuation of the pension plan requires more complex analysis of the salary of a pool of employees over the course of their entire careers than simply using recent labor cost changes which can be influenced by any number of factors that could vary from year to year. He testified that pension valuation depends upon the wage increases for a particular group of employees over the span of their respective careers. While wage rates may increase on average by 3% in one year, the increase for a particular employee over the span of his/her career is usually higher due to seniority, merit increases and promotions. (*Id.* at pp. 11-12.) Mr. Wolf quoted the comments to FAS87, which he testified reveal that Mr. Sommer is not considering the pertinent data for purposes of his criticism. Comment 46, FAS87, states that, "[a]ssumed compensation levels shall reflect an estimate of the actual future compensation levels of the individual employees involved, including future changes attributed to general price levels, productivity, seniority, promotion and other factors." (*Id.* at p. 13, lines 14-17.) Mr. Wolf further presented surveys conducted by Towers Perrin and Watson Wyatt, two nationally recognized actuaries, which show that Petitioner's wage rate assumptions are at the low end of the mainstream. *(Petitioner's Exhibit WJW-R3* and *WJW-R4.)*

Commission Discussion and Findings. We find that Petitioner's proposed pension expense adjustment should be partially accepted. While Mr. Gorman criticized the move from ERISA to FAS87, the evidence is unrebutted that pension expense will be lower and less volatile over the ensuing years if this change is made. In addition, no other actuarial valuation was presented which would produce a level of pension expense different from that presented by Petitioner. Pensions are valuable rights which are offered to employees, many times as a result of collective bargaining.

However, the Commission believes the loss component of the pension adjustment should not be accepted. Both Schereville's witness Sommer and Industrial Intervenor's witness Gorman objected to the recovery of this pro forma adjustment. Witness Sommer specifically notes that providing this adjustment to Petitioner's operating expenses will, in essence, force Petitioner's ratepayers who lost their own pension investments to cover this loss. We note that Petitioner's witness Wolf acknowledges that Petitioner is seeking to recover additional funds from ratepayers who themselves suffered pension losses (see Transcript, B-99). Mr. Sommer goes on to point out that there is no good regulatory policy served by allowing recovery of this past loss. Finally, Mr. Sommer points out that the market in which Petitioner's pension was invested, which caused pension losses to historically occur, has more recently recovered and Petitioner, on a pro forma basis, will potentially be overcompensated if this loss is allowed as part of Petitioner's revenue request. Accordingly, we find that Petitioner's proposed pension expense adjustment, less the loss component, should be accepted.

4. Depreciation Expense on Contributions in Aid of Construction

OUCC's Position. Mr. Gassert requested that the Commission revisit its practice of allowing the recovery of depreciation expense on contributions in aid of construction ("CIAC") because this allegedly proliferates troubled utilities which have an eroding or negative rate base. He further testified that allowing depreciation expense on CIAC encourages larger utilities to overinvest. Further, he testified that allowing a recovery of depreciation on CIAC causes customers to pay more than one time for the same plant.

Petitioner's Rebuttal. Mr. Cutshaw testified that Mr. Gassert is requesting the Commission to reverse a long-standing policy allowing depreciation expense on CIAC. Mr. Cutshaw cited the Commission's Orders in Cause No. 37182 dated December 7, 1983, and in Cause No. 39595 dated February 2, 1994. In the latter order, the Commission said that "the customers and the company benefit from the Commission's current practice of allowing depreciation on contributed property." Mr. Cutshaw testified that depreciation expense on CIAC provides additional internally generated funds to cover at least a part of replacement cost and that this results in lower external financing requirements, a factor which is particularly important for Indiana-American. Mr. Cutshaw explained that the Commission found this is the reason which supports recovery of depreciation expense on CIAC and has specifically rejected Mr. Gassert's argument that the Commission should change its policy to align with other jurisdictions. The Commission has noted that "Indiana has a broader perspective" which "provides that depreciation rates should be designed to provide the amounts reasonable and necessary to maintain the property in an operating state of efficiency corresponding to the progress of the industry," and that this "policy on CIAC depreciation better accomplishes this objective without adverse effect on the customer." (*Petitioner's Exhibit JLC-R*, pp. 31-32.)

Mr. Cutshaw testified that while depreciation on CIAC may create issues for small troubled utilities, Indiana-American does not encounter the same issues because of its size. Mr. Cutshaw explained that in the case of smaller utilities facing prospects of negative or eroding rate base, the OUCC would be free to argue that depreciation expense should not be recovered on CIAC in those particular circumstances. Mr. Cutshaw testified that in the case of larger utilities with growing demand for capital improvements, depreciation on CIAC continues to provide a low cost source of internally generated funds.

Commission Discussion and Findings. We commence our consideration of Mr. Gassert's request by reviewing our findings in *Indiana-American Water Co.*, Cause No. 39595:

> [OUCC witness] Mr. Effron's position would require a change in the Commission's policy regarding CIAC. Presently, we allow water utilities to recover depreciation on contributed property, but (a) the accumulated CIAC balance is deducted from the Company's original cost rate base and (b) the balance of CIAC is not reduced when the contributed property is retired. Under our present methodology, CIAC is an ever increasing amount and continues to be deducted from rate base long after the property represented thereby is retired . . .
>
> * * * *

> We do not agree with Mr. Effron's contention that replacements of contributed property, like replacements of other property, are not explicitly financed by depreciation expense included in the cost of service. Mr. Salser demonstrated that depreciation expense recoveries, including depreciation on CIAC, are internally generated funds used to finance replacements of property. Over time the contributed property will need to be replaced and the replacement costs will be many times more than the original cost of the property. The Commission's current policy of allowing the recovery of depreciation on the contributed property provides to the Company additional internally generated funds to cover at least a part of the replacement cost. This directly results in lower external financing requirements and is particularly important for Petitioner at this time because, as both Mr. Hargraves and Mr. Salser noted, the Company is facing significant financing requirements over the next five years.
>
> *Accounting for Public Utilities* states that the ratemaking treatment for depreciation on CIAC varies from jurisdiction to jurisdiction. Mr. Effron contends we should change our policy to align with jurisdictions which do not allow recovery of such depreciation on the theory that the purpose of depreciation is only to recover the cost of property. However, Indiana law has a broader perspective than that promoted by Mr. Effron. Ind. Code § 8-1-2-19 provides that depreciation rates should be designed to provide the amounts reasonable and necessary to maintain the property in an operating state of efficiency corresponding to the progress of the industry. We think our policy on CIAC depreciation better accomplishes this objective, without adverse affect on the customers. The FERC and FCC regulations which require that contributed property be written off to utility plant are neither comparable nor appropriate for water utilities.
>
> We believe the customers and the Company benefit from the Commission's current practice of allowing depreciation on contributed property. We find Mr. Effron's proposal to change this policy should be rejected.

Ind.-Am. Water Co., Cause No. 39595, p. 22-23 (Indiana Utility Regulatory Commission, Date Issued Feb. 2, 1994); 150 PUR4th 141, 158-59.

As we indicated previously, we are not averse to reconsidering our existing policies and practices; however, we depart from such practices only after very careful consideration convinces us that new evidence or circumstances warrant a change. We believe as a general matter that stability and predictability in regulatory policy is desirable. We do not change course simply to side with the majority. While the positions of other state commissions may be of interest, this Commission is duty-bound to make its own independent decisions on what is best for Indiana.

Reviewing Mr. Gassert's positions, we see a familiar refrain to the arguments we have already rejected. The only argument he has made which we have not previously considered is that the growing CIAC balance can lead to eroding rate base and thereby create troubled utilities. While we recognize the problems a negative rate base may cause with respect to small, thinly

capitalized utilities, we would be better served to address those concerns in a particular case involving such a utility. Such is not the case with Indiana-American. Indiana-American continues to have a growing demand for capital improvements, and depreciation on CIAC continues to serve the purpose of providing internally generated funds at a significantly lower cost of capital than would otherwise be available. Our findings in Cause No. 39595 continue to apply with equal force to Petitioner's position today. Also, depreciation on CIAC does not force customers to pay for the asset twice. The developer initially pays for the asset, and the customer thereafter pays rates to recover depreciation expense which supply the capital to replace the asset, thus reducing the need for external funding and associated cost. If we were to reverse our practice, the customers would still pay rates to recover depreciation on the replacement asset after it is placed in service, and they would be forced to pay the higher cost of external funding needed for the replacement. We find that in the current case we should continue our practice of allowing depreciation on CIAC and, therefore, reject Mr. Gassert's proposal.

5. Customer Satisfaction Center and E-CIS Project

As noted in our earlier discussion of the Petitioner's Rate Base, the OUCC's proposal to exclude the E-CIS project from rate base sufficiently relates to Petitioner's conversion to the Alton Customer Satisfaction Center to merit our consideration of both issues in this section of our Order.

Petitioner's Position. Petitioner testified that the Customer Satisfaction Center is a nation-wide customer service call center located in Alton, Illinois. This center will be open twenty-four (24) hours a day, seven (7) days a week. Petitioner states that customers will be provided with a high level of service in dealing with billing questions, scheduling service orders, establishing new service and locating convenient payment sites. Petitioner advised that once Indiana-American converts to the Illinois CSC, it will close its Indiana customer service center located in Richmond, Indiana.

Petitioner claimed that the new Customer Satisfaction Center would cost slightly more to Petitioner's customers, but it would provide new services and technologies that are not currently provided. Petitioner claimed these new services and technologies would come at a lower cost than if Richmond were to offer these services on its own. Petitioner said that the new center would use a leading edge Interactive Voice Response ("IVR") system that would pave the way for web-based interaction that would allow customers to access their accounts and pay bills online. The new IVR allows for "automatic call distribution" software to ensure an even distribution of in-bound calls and an "expert agent selection" software that will allow a customer call with a particular question to automatically be transferred to a representative, who has received specific training in that area.

Petitioner also testified that the other benefits of the Alton CSC related to human resources management. Petitioner explained that the CSC will utilize an "automatic call monitoring" software to evaluate the effectiveness of call handling and associate responsiveness to inquiries and a "workforce management" software to collect data from all of the new technologies to provide resource forecasting and scheduling to predict staffing needs. (*Petitioner's Exhibit DDC*, pp. 14-17.) Petitioner's witness Wolf disclosed that, according to Petitioner's analysis, the closing of the Richmond Customer Service Center and the move to the

Alton CSC will cause a net increase in test year expense of $91,840. This amount did not include the costs associated with the E-CIS software, which the OUCC considered to be a cost associated with the move.

Petitioner's witness James Cutshaw filed supplemental testimony and updated Petitioner's proposed rate base to include $6,248,821 related to the purchase and development of the E-CIS software. *(Petitioner's Exhibit JLC-U*, pp. 7-9; *Petitioner's Exhibit JLC-1-UA*, line 21, column 2.) In his supplemental direct testimony, Mr. Cutshaw alleged that E-CIS replaces an outdated Electronic Data Inquiry System ("EDIS") software program. He claimed that the EDIS program does not provide the functionality needed to effectively respond to increased customer demands for more detailed billing information nor does it allow for improved processes in handling customer inquiries. He explained that EDIS is not Windows-based and is not functionally compatible with other software packages and programs currently utilized. Also, Mr. Cutshaw said EDIS was not designed to support the current security threats related to network and internet technologies, does not provide a database to allow for resolution of data discrepancy issues and does not provide scalability to support "large water company" information needs. Mr. Cutshaw testified that with E-CIS, customer data is arranged more logically on the inquiry and input screens, allowing for more efficient access to customer data and more timely responses to customer inquiries. With the new software, customer bills will provide more detail regarding the nature and type of charges being billed. Mr. Cutshaw claimed that under EDIS, this level of detail was either unavailable or cost prohibitive due to the extensive reprogramming that would have been required to provide it.

Mr. Cutshaw testified that E-CIS was placed in service on March 8, 2004, and satisfies the definition of "major project" for purposes of the MSFRs. Petitioner testified that it utilized an approved depreciation accrual rate of 5.54% to compute the depreciation expense relating to the capitalized E-CIS costs. (*Petitioner's Exhibit JLC-U*, pg. 9.)

OUCC's Position. OUCC witness Dana Lynn stated that Petitioner's proposed net increase of $91,840 shown on page 7 of Mr. Wolf's testimony greatly understates Petitioner's true cost to participate in American's Customer Satisfaction Center initiative. Ms. Lynn noted that Petitioner has not included the $282,528 in amortization expense associated with the $1,345,305 of deferred costs it has recorded on its balance sheet related to the CSC. In addition, Petitioner has not included the return and depreciation it has requested on AWWSC's $6.2 million Orcom E-CIS software ($194,360), which is associated with the CSC. Ms. Lynn noted that if Petitioner would have calculated depreciation expense correctly, Petitioner's customers would be made to pay an additional $1,249,764 in depreciation expense and $592,174 in return. (*See Public's Exhibit 3, DML Sched. 1*, page 2.) In sum, Ms. Lynn determined that Indiana-American's ratepayers would pay an additional annual amount of $2,318,826 for the E-CIS conversion and Alton CSC transfer, after considering the additional depreciation expenses, return on investment and the higher operational cost of $194,360 as acknowledged by the Petitioner. ($2,318,826 = $282,528 + 194,360 + $1,249,764 + $592,174.) Thus, according to the OUCC, Petitioner substantially understated the true cost of its participation in the Alton CSC.

While Petitioner included $346,185 for depreciation expense, associated with the E-CIS software, the OUCC calculated $1,249,764 as the expense. Ms. Lynn explained her belief that there was a discrepancy between Petitioner's number and the $1,249,764 calculated by the

OUCC because Petitioner multiplied the E-CIS software costs by its old depreciation accrual rate for its Mainframe Computer Software account of 5.54%. In the Commission's Final Order, in Cause No. 40703, the Commission approved an increased depreciation accrual rate for Petitioner's Mainframe Computer Software account to 20%. Ms. Lynn stated that if Petitioner would have applied the correct accrual rate in its updated schedules, the depreciation alone would cost Indiana-American's ratepayers an additional $1,249,764 over the next five (5) years.

Ms. Lynn disagreed that AWWSC'S computer software should be recorded as Utility Plant in Service, and she asserted that Petitioner's proposed adjustment requests the Commission to approve $6,248,821 in Petitioner's rate base for software it does not need. Ms. Lynn testified that American is consolidating several subsidiaries, including Indiana-American, to the Alton CSC. The $6.2 million represents Indiana-American's portion of the total software cost that will be used by the CSC in Alton, Illinois. Indiana-American's Customer Call Center in Richmond, Indiana already operates on an EDIS. According to Ms. Lynn, it is not advantageous for Indiana-American to participate in AWWSC's Customer Satisfaction Center, and the E-CIS software is not necessary for the Richmond customer service center to continue its operations.

Ms. Lynn noted that the OUCC asked Petitioner to provide a copy of the contract to purchase and develop the Orcom E-CIS software for the Alton CSC. Petitioner provided a copy of an agreement with addendums between AWWSC and Orcom Systems, Inc., which was entered into evidence during the OUCC's cross-examination of Mr. Eckart. (*Public's Exhibit CX-2.*) Ms. Lynn noted that Indiana-American was not a party to this agreement and does not own the software rights. Ms. Lynn argued that the ratepayers of the State of Indiana should not be made to pay either a return on or of an investment that the utility does not own or, as explained further below, for costs associated with an unregulated affiliate's venture that does not accrue any quantifiable benefits to the utility or its customers.

Ms. Lynn stated that the additional cost to Indiana-American's ratepayers, if the Petitioner is allowed to recover in rates its move to the CSC in Alton, Illinois, is over $2.3 million per year. Ms. Lynn provided the following table based on the OUCC's analysis to illustrate the adjustments that would be necessary if the Commission were to accept Petitioner's proposal to participate in American's CSC:

OUCC UPDATED	Customer Service Increase/(Decrease)
Labor	$ (1,007,762)
Purchased Power	(17,471)
Management Fees	2,384,726
Group Insurance	(263,031)
Customer Accounting	(23,684)
General Office	(552,303)
Miscellaneous (($240,878) + $282,528)	41,650
401 (k)	(2,600)
Depreciation Expense	1,249,764
Return on Software	592,174
General Taxes	(82,637)
Net Change	**$ 2,318,826**

Public's Exhibit 1, Attach. Nos. 9 and 10.

Ms. Lynn noted that, while Petitioner did not provide any work papers to support the proposed cost increase for its participation in the Alton CSC, in Cause No. 42043 the Petitioner did provide the OUCC a discovery request response that reflected a pay back period of 115.44 months ($1,791,486 estimated implementation costs/$186,231 project savings x 12 months) for Indiana-American's participation in American's customer call center for an annual saving of $186,231 per year. (*Public's Exhibit 3, Attach. No. 4.*) However, Ms. Lynn added that Petitioner's payback calculation is flawed since it failed to include the Orcom Software cost of $6,248,821 and the amortization of the implementation cost of $282,528. She stated that after these costs are included, there are no annual savings. Therefore, there will never be a payback on this investment. Ms. Lynn stated that once Petitioner recognized there would be no payback to participate in this joint venture, it should have abandoned the program.

Ms. Lynn testified that it is neither necessary nor reasonable for Indiana-American to participate in American's initiative to consolidate its subsidiary customer call centers, noting that Indiana-American has a customer call center located in Richmond, Indiana that is open Monday through Friday, from 7:30 a.m. to 6:30 p.m., and provides quality service. Ms. Lynn also noted that Indiana-American did not perform any analysis or studies that would support the need to transfer its customer service operations to Illinois. In response to an OUCC Data Request, Mr. Cole admitted that "No studies have been done in regard to incorporating the services provided at the Customer Satisfaction Center in the Richmond Call Center due to our inability to justify the level of expense this would generate." (*Public's Exhibit 3*, p. 11, lines 4-15.)

Ms. Lynn also advised that the "Business Case Review" American relied upon to move forward with the customer satisfaction center contained information specifically addressing Indiana-American. Ms. Lynn added that only two (2) comparisons were made in the "Business Case Review" of the Richmond Call Center and the Alton CSC. The first compared average handle time and the second was the abandonment rate. If Indiana transferred to Illinois, the

review shows that the average handle time is projected to decrease from 7:16 minutes to 5:00 - 5:30 minutes, but the abandonment rate will increase from 2% to between 5% and 5.5%. American failed to complete the comparisons for the availability of consumer service representatives ("CSRs"), the cost per call or the quality of service.

Ms. Lynn observed that Indiana-American had already attained economies of scale and centralized its Customer Service Center in Richmond. Ms. Lynn added that Petitioner's witness, Mr. Cole had testified in Cause No. 42029 that its Richmond customer service facility has provided customer inquiry handling capabilities for all of Indiana-American since 1994. Mr. Cole also testified that a cost saving of $651,000 had been realized as a result of the centralized customer service center. Finally, Mr. Cole testified that Indiana-American improved its quality of service by improving its efficiency of handling and processing customer inquiries through implementation of Indiana-American's EDIS and automated service order preparation. On pages 54 and 55 of his testimony in Cause No. 42029, Mr. Cole extolled the strengths of its efforts by stating the following:

> The first example would be our implementation of Indiana-American's Electronic Data Inquiry System ("EDIS") and automated service order preparation within the acquired operations [has] resulted in a more efficient method for responding to customer inquiries. With the EDIS system in place, customers can call from anywhere in the State of Indiana into our Richmond facility utilizing a toll free number and discuss their problems or concerns with a customer service representative. A service order will then automatically print out in the location in which the work needs to be done. This will improve the efficiency of handling and processing customer inquiries....We've also made available Xpress Cheque, an automatic bill paying service, to all customers with the acquired operations as well.

Thus, Ms. Lynn asserted, Indiana-American's ratepayers have already paid for and received high quality customer service from a relatively modern system. (*Id.* at p. 11.)

Describing how AWWSC charged Indiana-American for the Alton, Illinois implementation costs, Ms. Lynn noted that AWWSC charged Indiana-American an allocated portion of its implementation costs based on the number of customers that Indiana-American had on a particular date. To date, this allocation was $7,594,126 ($1,345,305 + $6,248,821). Ms. Lynn further testified that the method that AWWSC used to allocate these costs will cause Indiana ratepayers to subsidize efficiency improvements for other states. Ms. Lynn noted that the CSC is just one instance where the OUCC has found this subsidy to occur. This method of allocation causes Indiana ratepayers to subsidize the inefficiencies that exist in other states. Based on the "Business Case Review" American expects to save over $31 million system-wide in a five (5) year period, or over $6 million annually. Thus, while some of American's subsidiaries operating in other states will share in the $6 million projected annual savings, Indiana-American ratepayers are expected to pay an additional $2.3 million every year. Ms. Lynn concluded that it is unreasonable to request Indiana-American's customers to pay significantly more so Petitioner's affiliates can attain a savings. (*Id.* at pp.12-13.)

Ms. Lynn also provided a schedule analyzing information contained in AWWSC's request for a proposal to receive bids on its implementation study for the Customer Satisfaction Center. As shown by that schedule, several states have more than one customer call center. Ms. Lynn reiterated the fact that Indiana-American's ratepayers paid to have its customer call center centrally located in Richmond less than ten (10) years ago. Further analysis also shows how efficient its call associates are when handling customers. Ms. Lynn testified that the associates located in Richmond are more efficient than any of AWWSC's existing call centers in its five largest states, and the Richmond call associates exceed the mean average of customers handled per associate by more than 25%. (*Id.* at p. 14.)

Ms. Lynn also noted that customers will incur additional costs if Indiana-American retires its assets associated with the Richmond call center before they are fully depreciated. This is because the undepreciated cost will remain in accumulated depreciation. Ms. Lynn observed that AWWSC has not shared any of its projected cost savings with Indiana-American. Instead, Indiana-American has been made to pay more than $8 million in implementation costs.

Ms. Lynn testified that the Commission should not include any of the implementation costs in Indiana-American's rates, noting that this is not truly Indiana-American's initiative but an affiliated company's initiative. It may be more economical for other sister companies to participate in American's CSC initiative but these economies of scale should not be achieved on the backs of Indiana ratepayers. The OUCC recommended removal of $6,248,821 from rate base for the software cost and claimed Petitioner should not be allowed to recover the amortization of the $1,345,305 deferred costs. Thus, Ms. Lynn removed the annual amount of $282,528 from miscellaneous expense.

Ms. Lynn also expressed concern that more implementation costs might apply. Ms. Lynn noted that Petitioner has testified that it is still transitioning to the Alton CSC. In Cause No. 42043, Petitioner responded to the OUCC's discovery that its share of American's $17,811,898 implementation cost was $1,791,486 or 10.06%. In this Cause, Petitioner responded to OUCC discovery that the implementation costs for American's CSC have increased to $18,393,677. Thus, Indiana-American could in a subsequent rate case be allocated an additional $505,099 (($18,393,677 x 10.06%) – $1,345,305)) in implementation costs before American completes its transition. Ms. Lynn asserted any additional implementation costs associated with the CSC in Alton, Illinois should likewise be denied. (*Id.* at p. 15.)

Ms. Lynn concluded that Petitioner should not be permitted to recover costs recorded to Utility Plant that were not necessary. She added that the E-CIS software is not being used for Indiana-American's operations at its Richmond facilities, but that it is only necessary for participation in AWWSC's CSC. Ms. Lynn stated that Petitioner has not shown quantifiable benefits to its Indiana customers resulting from its participation in the Alton CSC. Based on the testimony provided by the OUCC, Ms. Lynn stated that Petitioner's proposed increase in management fees associated with its participation in AWWSC's Customer Satisfaction Center should be denied. The following reflects the OUCC's elimination of Petitioner's pro forma adjustments reflecting the test year cost associated with the Richmond, Indiana customer call center.

OUCC Update	Customer Service Increase/(Decrease)
Labor	$ 1,007,762
Purchased Power	17,471
Management Fees	(2,384,726)
Group Insurance	263,031
Customer Accounting	23,684
General Office	552,303
Miscellaneous	240,878
401 (k)	2,600
General Taxes	82,637
Net Change	**$ (194,360)**

Public's Exhibit 1, Attach. Nos. 9 and 10.

Ms. Lynn noted the foregoing adjustment is based only on the accounts that Petitioner identified as its customer satisfaction center adjustments. The OUCC adjusted for the amortization costs, depreciation expense and rate base costs associated with American's CSC in separate adjustments. (*Id.* at pp.16-17.)

Petitioner's Rebuttal. Petitioner claims that the Commission should view the purchase and development of the E-CIS software as a separate project from the conversion costs to the Alton CSC. Petitioner testified that the decision to convert to the E-CIS software was made well before the decision to consolidate all of American's affiliated utilities' call centers into one centralized location. Thus, in rebuttal, Petitioner's witness Eckart disputed Ms. Lynn's views that the E-CIS project is a cost of converting to the CSC. Mr. Eckart testified that a decision to replace EDIS with E-CIS was made in 1996. Mr. Eckart further stated that the E-CIS decision pre-dated consideration of a national call center, which did not begin until the Fall 1998. Mr. Eckart said that the acquisition of E-CIS was not a result of Petitioner's conversion to the Alton CSC because it would have occurred regardless of that fact. (*Petitioner's Exhibit JEE-R*, pp. 29-30.)

Petitioner also submitted the rebuttal testimony of A. Joseph Van den Berg, a principal with Deloitte Consulting, LLP, on the issues raised by Ms. Lynn. Mr. Van den Berg is the Strategy and Operations and Customer Relationship Management Lead Partner for the Energy and Utilities Practice within Deloitte. Mr. Van den Berg stated he is familiar with the Alton CSC from prior engagements and has toured the facility. In connection with his review of Ms. Lynn's testimony, Mr. Van den Berg claimed he undertook extensive data collection, including interviews with Indiana-American, Alton CSC and AWWSC personnel in various roles. (*Petitioner's Exhibit AJV-R*, pp. 1-6.)

Mr. Van den Berg first disputed Ms. Lynn's opinion that E-CIS was unnecessary. He repeated Mr. Cutshaw's supplemental testimony in his discussion about EDIS not being capable of various requirements that occur in today's computing environment. In particular, he stated that EDIS suffered from the inability to handle security challenges and threats resulting from an

expanded network and Internet uses, the lack of a detailed database to allow for data discrepancy resolution and the inability to continue to scale to Indiana-American's growing customer needs. (*Id.* at p. 7, lines 20-23; *Petitioner's Exhibit JLC-U*, p. 8, lines 4-7.) Mr. Van den Berg testified that there was no consistency among the operating companies on EDIS and, as a result, the utilities were operating six (6) versions of EDIS out of three (3) data centers. He testified that not only was the network of systems complicated to maintain, but enhancements made in one location could not be shared in others. He said that continuing the use of EDIS would require extensive enhancements. Mr. Van den Berg testified that Indiana-American had studied the issues surrounding the inabilities of the EDIS system since the mid-1990s and had been planning to replace its EDIS software for some time. (*Petitioner's Exhibit AJV-R*, p. 8.) Mr. Van den Berg testified that it was not until after some states had already initiated the implementation of E-CIS that, rather than incurring the cost to expand multiple versions of E-CIS, management made the decision to implement a single platform on a basis that was cost effective for Petitioner and its utility affiliates. (*Id.* p. 8, lines 6-12.)

Mr. Van den Berg also repeated Mr. Cutshaw's position that E-CIS is more sophisticated, consistent and user-friendly than EDIS. Mr. Van den Berg testified E-CIS was Windows-based and has a graphical user-interface as opposed to the mainframe, "green-screen" approach of EDIS. This allows E-CIS to be compatible with other packages and programs currently in use and supports enhanced real time reporting. (*Id.* at pp. 9-10; *Petitioner's Exhibit JLC-U*, pp. 7-8.)

Mr. Van den Berg also asserted the superiority that E-CIS will have in viewing customer account information and the planned internal website resources. Mr. Van den Berg testified that E-CIS has many more billing capabilities and allows users to personalize the customer's experience. For example, bill due dates of individual customers can be easily changed, a feature lacking in the old software. Also, more time is allowed for personnel to review bills and correct mistakes before mailing. E-CIS also provides the ability to generate detailed bills that itemize every component of the total bill amount. (*Petitioner's Exhibit AJV-R*, pp. 10-11; *Petitioner's Exhibit JLC-U*, pp. 7-8.)

Relying on a survey of twenty (20) utility companies included in *Chartwell's 2002 CIS Report*, Mr. Van den Berg asserted that it would have cost Petitioner $5.9 million to $7.5 million to upgrade its existing EDIS program. (*Petitioner's Exhibit AJV-R*, p. 12, lines 1-4.) However, according to Mr. Van den Berg, EDIS was in need of replacement and not just an overhaul. Mr. Van den Berg estimated that a full Customer Information System ("CIS") implementation would cost a company of Petitioner's size between $8.04 million and $29.48 million. (*Id.* at lines 19-22.) Mr. Van den Berg said this includes, but is not limited to, expenditures on vendors, consultants and integrators for hardware, software and services; payroll costs, overtime pay, bonuses, and temporary staffing; project space and training facilities; and amounts for extended capabilities, such as bill production, change management, and data warehousing. Based on his analysis, Mr. Van den Berg came to the same conclusion as stated by Mr. Cole in his testimony that, given his cost projections, replacing EDIS on its own was not Petitioner's best option. Rather, as Mr. Cole testified, by joining with the other utility subsidiaries of American in the cost of a modern CIS, the new E-CIS program could be implemented at a much lower cost than for Petitioner to do so by itself. (*Id.* at pp. 13-14; *Petitioner's Exhibit DDC*, p. 17.)

Mr. Van den Berg also disputed Ms. Lynn's testimony that the cost to Petitioner of the E-CIS software should not be included in Petitioner's rate base because Petitioner allegedly does not own the software rights. He noted that the Orcom contract was signed by AWWSC to make E-CIS available to American's utility subsidiaries, including Petitioner, at cost. He said AWWSC was acting on behalf of American's utility subsidiaries as a result of a decision of the utilities' Presidents. Mr. Van den Berg said that this was further demonstrated by Petitioner's payment directly to Orcom of its share of the initial payment. (*Petitioner's Exhibit AJV-R1.*) Instead of taking on by itself all the capital costs and risks associated with implementing a new CIS, Petitioner was able to benefit from the leveraging of existing assets, systems and processes within the American organization. Mr. Van den Berg testified that by implementing the software package through AWWSC, Petitioner was able to achieve substantial customer benefits at a lower cost than creating a duplicative system owned solely by Petitioner. (*Id.* at pp. 13-14.)

Mr. Eckart testified that the decision to implement E-CIS was separate and distinct from the decision to combine all call center operations at the Alton CSC, which was affirmed by Mr. Van den Berg. Both also testified that Petitioner made the E-CIS decision in the mid-1990s before the process of evaluating a national call center had begun. Petitioner's decision to "go live" on E-CIS at the time of moving to the CSC was based upon a desire to minimize training and other change management costs. Mr. Van den Berg said that the Richmond Call Center could have operated with E-CIS and, likewise, the EDIS system could have been used by the Alton CSC. In Mr. Van den Berg's opinion, neither would have been the best course of action. (*Id.* at p. 15; *Petitioner's Exhibit JEE-R*, pp. 29-30.)

Mr. Van den Berg testified that today's customers have expectations that are driven by industry standards for customer service, and that the Alton CSC is a state-of-the-art facility that is capable of meeting these standards. He testified that the costs incurred by Petitioner in transitioning to the Alton CSC are reasonable and in line with industry averages required to implement such a system or to upgrade an existing system to the same level and quality as that offered by the Alton CSC. (*Petitioner's Exhibit AJV-R*, p. 17.)

Mr. Van den Berg reiterated the prefiled testimony of Mr. Cole that the Alton CSC operates twenty-four (24) hours per day, seven (7) days per week. He also stated that the CSC provides an IVR system that offers many advantages over the system at the Richmond facility, such as allowing customers to complete more self-service transactions, supporting automatic call distribution and computer telephony integration and enabling skill based routing. Further, an effective IVR paves the way for web-based information access and self-service transactions, such as for meter reads, service turn on/offs and customer surveys. Mr. Van den Berg noted the CSC also supports automatic call monitoring which, Mr. Van den Berg stated, greatly enhances the quality assurance process by allowing managers to record and review telephone interactions. Further, the CSC has the ability to handle call volume smoothing, which will allow greater control over staffing. (*Id.* at pp. 19-22; *Petitioner's Exhibit DDC*, pp. 15-16.) Mr. Van den Berg also testified that a great enhancement in the Alton CSC is its bilingual capabilities. (*Petitioner's Exhibit DDC*, p. 15.) He noted that according to the United States Census Bureau, the Hispanic population in Indiana grew by nearly 120% from 1990 to 2000, and many of the areas with the greatest Spanish-speaking population are served by Petitioner. (*Petitioner's Exhibit AJV-R*, p. 22.)

Mr. Van den Berg disagreed with Ms. Lynn's contention that the Richmond facility would continue to be adequate on a going forward basis. While the Richmond facility may have been offering an acceptable level of service, Mr. Van den Berg testified that the Richmond facility was beginning to outgrow its capabilities and lagging behind the requirements of centers in today's customer service landscape. (*Id.* at pp. 22-23.) Mr. Van den Berg cited testimony received at the Jeffersonville Field Hearing in this Cause to demonstrate how the CSC was responsive to customer expectations. There, a customer complained about the inability of customer service representatives to access complete real-time customer service information after normal business hours. The customer was left with the impression that Petitioner is not "consumer-friendly." (*Petitioner's Exhibit AJV-R3*, p. 30.) Mr. Van den Berg explained that, since Petitioner has completed its transition to the CSC, all calls are logged real-time in a central location to which all customer service representatives have access. Further, customers are able to call and speak to a customer service representative twenty-four (24) hours a day, seven (7) days a week. Calls are routed automatically to an agent with the proper expertise to resolve the issue. Finally, customers not fluent in English will still be able to communicate about their needs.

Mr. Van den Berg estimated the cost for Petitioner to upgrade the Richmond facility to the level of service now provided at the Alton CSC. Mr. Van den Berg testified that, excluding a new CIS, Petitioner could expect to incur costs in the range of $2.7 million to $5.5 million for such upgrades, an amount significantly greater than its share of the one-time implementation cost of the Alton CSC of $1,345,305. (*Petitioner's Exhibit AJV-R*, p. 26.) Mr. Van den Berg also compared the annual cost in terms of return, depreciation and amortization of his estimates for both upgrading the Richmond facility and implementing a new CIS to the annual revenue requirement for E-CIS and the Alton CSC as quantified by OUCC witness Lynn. Mr. Van den Berg's analysis showed that Petitioner's E-CIS and CSC costs were significantly less than the go-it-alone alternative. (*Petitioner's Exhibit AJV-R4.*)

Mr. Van den Berg also believed Ms. Lynn's position that the CSC costs should have been directly charged to each participant, rather than allocated, should not be considered. Mr. Van den Berg said the cost allocation was made in accordance with the service company agreement on file with the Commission since 1989. This agreement provides that common costs incurred by AWWSC that cannot be related exclusively to one utility shall be allocated to American's utility subsidiaries based on the number of customers. Mr. Van den Berg said that the CSC was developed jointly among the operating companies and the allocation of costs was consistent with the treatment of other comparable costs and fair for all the utilities. Mr. Van den Berg noted that regardless of whether some companies may have experienced a bigger leap in their customer care operations than others, Petitioner achieved both cost savings and an increased level of service by participating in the CSC. (*Id.* at pp. 27-29.)

With respect to the E-CIS project depreciation rate issue, Petitioner's witness Cutshaw responded in rebuttal that Petitioner had proposed use of a 5.54% rate because it would have less of a rate impact. However, he stated that Petitioner does not oppose the OUCC's position that the 20% depreciation accrual rate should be used to determine depreciation expense for the E-CIS project. (*Petitioner's Exhibit JLC-R*, p. 26-27.)

Commission Discussion and Findings. As mentioned earlier in the rate base section of this Order, we believe there is enough of a relationship between the acquisition of the E-CIS software and the consolidation of customer services in Alton, Illinois to discuss these two issues jointly in this portion of the Order. We also note that as much evidence relevant to these issues was elicited during cross-examination as was presented in the parties' prefiled testimony.

Petitioner requested we approve the return on and of $6,248,821 related to the purchase and development of the E-CIS software. In addition, there is $194,360 in increased operating costs caused by Indiana-American's participation in the Alton CSC. Petitioner also seeks $282,528 in amortization costs of the $1.3 million deferred asset balance associated with the conversion to the Alton Customer Satisfaction Center. The OUCC recommended that the $6,248,821 associated with the E-CIS software be disallowed and removed from its rate base, and that Petitioner be denied the $282,528 in amortization costs of the $1.3 million deferred asset balance associated with the conversion to the Alton CSC. In addition, the OUCC recommended that the Commission accept its $194,360 downward adjustment to offset the increased O&M costs that is embedded in Petitioner's management fee adjustment for the Customer Satisfaction Center.

Sufficient evidence was presented to lead us to conclude that Petitioner's decision to upgrade its EDIS software to Orcom's E-CIS was made prior to the decision to consolidate its customer service functions in Illinois. What is at issue, however, are the costs and the need associated with (1) the decision to abandon the Richmond, Indiana consolidated customer service center and move to an out-of-state, multi-state consolidated service center and (2) the acquisition of an upgraded customer billing/service database that has expanded significantly in cost. In the initial three-year contract (1996-1999) between American and Orcom, Orcom agreed to develop E-CIS software that would be able to "go live" at eight (8) sites, of which Richmond, Indiana was one; Petitioner witness Eckart stated that "going live" meant the Orcom Customer Information System was installed and being used in the production of bills. (Tr. at E-14.) Indiana-American's portion of the cost to design and implement the software was 9% of the total $7.3 million cost.

Whether the OUCC should have known or not, we derive from the cross-examination testimony of Ms. Lynn that the Public was not readily aware that the upgrade to E-CIS was not limited to the initial Orcom contract. According to testimony and rebuttal evidence from Petitioner witnesses Eckart and Van den Berg, the initial American-Orcom contract for E-CIS serving eight (8) utilities was supplemented by an October/November 2000 contract between American and Accenture (formerly Anderson Consulting). (Tr. F-18, line 22 through F-19, line 4.) As we understand Petitioner's testimony, the initial Orcom "piece" of the E-CIS upgrade comprises only about 10% of the total work (and cost) needed to effect the E-CIS upgrade and application in the context of the consolidated customer service center. According to Petitioner, the cost of the second contract to develop and implement the E-CIS for the Alton CSC is $71,416,845. (Tr. D-49, line 21; E-69 lines 1-3.) The only contract in evidence, however, is American's 1996 through 1999 contract with Orcom.

After entering into the initial American-Orcom contract but prior to American's decision to cause Indiana-American to convert to Alton, a decision was made to include twenty-two (22)

utility locations, including Petitioner, to participate in the Alton CSC and to implement the E-CIS software for all participating utilities. Mr. Van den Berg testified that, dissatisfied with Orcom's customization work, the Petitioner entered the supplemental contract with Accenture for the purpose of developing a single instance of E-CIS for the Alton CSC. (Tr. F-22, lines 5-12.) The total cost of developing and installing the E-CIS software rose from $7,326,422 to $71,416,845. (Tr. D-49, line 21; E-69 lines 1-3.) And, though there are now twenty-two (22) installation locations using E-CIS, instead of eight (8), Indiana-American is expected to pay roughly the same percentage of the allocation: 9% of $71,416,845, instead of 9% of $7,326,422.

Putting the cost issue aside momentarily, we find that Petitioner presented sufficient justification for the need to upgrade to the E-CIS database. In his rebuttal testimony, Mr. Van den Berg explained the need for the E-CIS database, the benefits to be derived by Petitioner's customers and the advantages it offers over the EDIS database being replaced. According to Mr. Van den Berg, when compared to EDIS, the E-CIS software is more compatible and easily adaptable to other programs or packages used by Indiana-American, is user-friendly and allows employees to generate more sophisticated and "real time" reports. (*Petitioner's Exhibit AJV-R*, pp. 9-10.) He stated that the EDIS system used at the Richmond, Indiana service center could not "handle security challenges and threats resulting from expanded network and Internet uses, lack[ed] a detailed database to allow for data-discrepancy resolution" and could not be enhanced to meet "growing customer needs" because it lacked space to accommodate new computer code. (*Id.* at pp. 8-9.) With the E-CIS system in place, Mr. Van den Berg claimed that customers would benefit by receiving additional billing information (i.e., detailed usage, separated fixed charges), having the capability to select a different payment date and receiving accurate statements since Indiana-American employees would have additional time to correct billing errors before the statements are mailed. (*Id.* at p. 10.)

The question still remains, however, as to the amount of costs to allow for the software upgrade. First, we are unable to determine with any specificity the identity of the additional products and/or services that caused the total price to increase from $7,326,422 to $71,416,845. In addition, other than the testimony that Indiana-American's parent allocated the cost based on its percentage of the total customers served, Petitioner has not satisfactorily explained why it is more expensive for Indiana-American to go live with E-CIS as one (1) of twenty-two (22) companies with which to share the costs, than it would have been as one (1) of only eight (8). Petitioner witness Van den Berg acknowledges that providing software for twenty-two (22) utilities, many subject to different sets of regulations, would be more costly than providing the service for eight (8) utilities. However, we would expect some economies of scale since the Petitioner is now sharing the cost with almost three (3) times the number of participants originally proposed. Instead, Petitioner is expected to pay roughly the same percentage of a much greater expense. Also, we note the recent trend of Indiana-American to speak of attaining economies of scale within the state only to subsidize smaller American utilities by paying shared costs through a suspect allocation method; a method which does not credit economies of scale reached by the individual utilities. Since the evidence is not sufficient either to justify the Petitioner's requested expense or to reconcile the discrepancy of cost allocation, we find the most reasonable cost to allow Indiana-American is the allocation of $659,378 (9% of $7,326,425) as agreed to in the initial, three-year Orcom contract as the E-CIS was planned to be developed and implemented before the decision to include Indiana-American in the Illinois CSC.

With respect to the move from the customer service center in Richmond to Alton, Illinois, we believe the OUCC has presented compelling reasons to find that the move was imprudent and not reasonably necessary. First, the OUCC discovered that the Petitioner failed to perform any studies regarding the transfer of the Richmond center's services to the Alton CSC before the transition occurred and, by the time the Petitioner secured an expert to testify about general customer services at Richmond, the Richmond center had ceased being Indiana-American's customer call center. Second, the OUCC testified that the cost to Petitioner's ratepayers for Petitioner to participate in the consolidated customer service center would be approximately $2.3 million additionally each year. Petitioner had filed testimony in Cause No. 42029 that suggests that 88.28% of Indiana-American's customers were very satisfied with the detailed information contained on their bills when compared to other utility bills. Third, the Public also offered evidence that suggests that the Richmond call associates were very effective in handling its customer's needs. Fourth, when Petitioner surveyed its customers about the overall quality of service received from the call associates located at the Richmond facility, Mr. Eckart testified that 84.49% of Indiana-American's customers were satisfied with the overall quality of service received from the water company's customer call associates located in Richmond. Furthermore, Mr. Eckart testified that an 85% satisfaction rating from these surveys was Petitioner's goal:, stating that an 85% rating would mean Petitioner had achieved "world class" service. Thus, Richmond's Customer Service Center was considered "world class" based on the customer survey results provided as Public's Exhibit CX-4.

The OUCC also recalled testimony from Petitioner in Cause No. 42029 that the centralization of Indiana customer services in Richmond resulted in economies of scale. Petitioner stated in this Cause that, by consolidating service centers for all American companies in Illinois, economies of scale can be captured because the Petitioner can provide all the new services it described at a much lower cost than it would have incurred to provide them by itself. We believe that Petitioner's rebuttal evidence is not sufficient to allow such a conclusion. We believe that Petitioner gained its economies of scale when it centralized its customer service functions into one call center in Richmond, Indiana less than ten (10) years ago when Petitioner estimated a savings of over $650,000 annually as a result of the consolidation. Moreover, the Public demonstrated that with or without the inclusion of the E-CIS software in its analysis, there would never be a payback to Petitioner for its participation in American's Alton CSC initiative.

We conclude that the Richmond center was providing adequate service to Indiana-American's customers who, for the most part, have been satisfied with the level of service provided by the Richmond center. Petitioner's evidence in this proceeding is insufficient to demonstrate the necessity to move and consolidate Indiana's customer service functions into a national customer service center. We find it appropriate, therefore, to limit this expense to the amount already reflected in Petitioner's rate base for the Richmond Customer Service Center.

We also share the concern expressed by the OUCC that Petitioner is asking its customers to subsidize other states' inefficiencies. The OUCC testified that according to the "Business Case Review," American expects to save approximately $6 million each year over the next five (5) years as a result of establishing the Alton Customer Satisfaction Center, but Indiana-American is expected to pay $2.3 million each year. As a result, some of Petitioner's inefficient affiliates will share in the savings, while Indiana customers are expected to pay more. Indiana

customers benefited from the efficient customer service center in Richmond and should not now be financially penalized so that a consolidated grouping of efficient and inefficient affiliates can produce a savings for the parent company.

While we accept as a general concept that consolidations and shared services can result in greater benefits and efficiencies, we will review any such request separately and with an eye toward the impact on Indiana ratepayers. Within any such review we expect complete and substantial justification for the anticipated benefits and efficiencies.

Finally, Petitioner has openly recognized, even prior to this Cause, that the establishment of a consolidated call center could lead to the elimination of jobs in Indiana. Nonetheless, it is disturbing that what we find to be an imprudent decision to establish a consolidated call center, with respect to Indiana customer service needs, is exacerbated by the elimination of forty-seven (47) customer service jobs in Richmond, Indiana.

6. Purchased Power

Petitioner's Position. Petitioner proposed an increase to pro forma purchased power costs of $259,376 to reflect an increase in electric costs paid to Cinergy. Petitioner's witness Tapp testified that Cinergy had filed for a 16.1% rate increase that was anticipated to be effective in early 2004. (*Petitioner's Exhibit BIT,* p. 18, lines 20-23.)

OUCC's and Intervenor's Position. The OUCC and Intervenor Schererville opposed Petitioner's adjustment to pro forma purchased power costs attributable to the Cinergy rate proceeding. OUCC witness Ms. Stull testified that the adjustment was not fixed, known or measurable because Cinergy's rate case proceeding was still being litigated before the Commission. (*Public's Exhibit 2*, p. 16, lines 1-6.)

Petitioner's Rebuttal. Petitioner alleged that it appeared evident the Commission would grant a rate increase in some amount to Cinergy. Petitioner's witness Cutshaw testified that the proposed orders filed in the Cinergy proceeding showed that the OUCC was recommending an across-the-board increase of 4.2%, while Cinergy was now proposing an overall increase of 11.2%. (*Petitioner's Exhibit JLC-R*, p. 21, lines 16-18.) Mr. Cutshaw assumed the Commission should, at a minimum, adjust Petitioner's pro forma power costs to reflect the smallest rate increase being proposed in the Cinergy rate proceeding. (*Id.* at lines 18-20.) Mr. Cutshaw stated that this would result in an adjustment of $67,665. (*Petitioner's Exhibit JLC-R8.*)

Commission Discussion and Findings. On May 18, 2004, we issued our order in the Cinergy rate proceeding, Cause No. 42359, and granted an 8.36% rate increase. This increase is now fixed, known and measurable. Accordingly, we find that test year purchased power costs should be increased by $134,682.

7. Purchased Water

Petitioner's Position. Petitioner's witness Tapp testified that due to the addition of a new plant in Newburgh, Petitioner's demand for purchased water from the City of Evansville's

municipal utility had diminished by an estimated 58%. (*Petitioner's Exhibit BIT*, p. 17, lines 3-8.) The costs saved by reduced demand were offset somewhat by an anticipated rate increase for Evansville for the water Petitioner still purchases. (*Id.* at lines 8-13.) The Commission had not issued an order in the Evansville rate proceeding at the time Mr. Tapp's prefiled testimony was submitted, so Mr. Tapp presumed that the entire increase requested by Evansville would be granted by the Commission. Adjusting for the reduced demand and increased cost, Mr. Tapp claimed a negative purchased water adjustment for Newburgh of $12,822 was warranted.

OUCC's Position. At the time that the OUCC submitted its case-in-chief, the Commission had issued an order in the Evansville's rate proceeding. OUCC witness Stull testified that the final order issued by the Commission in that proceeding had adopted a rate increase of 15.38% and recommended that this be used to calculate the Newburgh purchased water adjustment. (*Public's Exhibit 2*, p. 13, lines 9-15.) Ms. Stull accepted Petitioner's estimate of the decreased volumes it will purchase from Evansville. (*Id.* at lines 15-19.) Accepting Ms. Stull's methodology would result in a decrease to test year purchased water expense of $28,671.

Intervenor's Position. Intervenor, Town of Schererville, advocated allowing no expense for the cost of purchased water from the City of Evansville. Schererville's witness Sommer testified that the final order in the Evansville rate proceeding specifically found that the City of Evansville was not going to be selling any water to Petitioner. (*Intervenor Schererville's Exhibit 1*, p. 18, lines 11-16.)

Petitioner's Rebuttal. Petitioner accepted the OUCC's adjustment for purchased water costs in Newburgh. (*Petitioner's Exhibit JLC-R*, p. 19, lines 17-20.) Petitioner disagreed, however, with the Town of Schererville's proposal to allow no expense for the cost of purchasing water from Evansville. Mr. Cutshaw testified that regardless of what may have been said in the Evansville rate order, Petitioner was still a customer of Evansville, and should be able to recover the prudent purchased water costs it is reasonably anticipated to incur. (*Id.* at p. 20, lines 7-9.) Mr. Cutshaw testified that actual purchases for the most recent twelve (12) months totaled 41,535 thousand gallons. (*Id.* at lines 5-7.)

Commission Discussion and Findings. All parties agree that Petitioner has constructed a new water treatment plant in Newburgh and that this plant is included in Petitioner's rate base. What is in dispute is how much, if any, water will continue to be purchased from the City of Evansville. In our Final Order in Cause No. 42176 ("Evansville Order"), we recognized that Petitioner would continue to be connected to Evansville and may need to use Evansville as a "backup" source of water supply. (*Evansville Mun. Water Works Dept.*, Cause No. 42176, p. 9-10 (Indiana Utility Regulatory Commission, Date Issued Feb. 18, 2004).)

That being said, this Commission intended the term "backup" to be used in the sense of an emergency source of supply and that purchases would be infrequent and difficult to predict or budget. Indeed, in that case we rejected a request to adjust Evansville's revenues because "any amount that Indiana-American may or may not purchase in the future is not fixed, known and measurable and therefore would not properly be included in [Evansville's] adjusted test year operating revenues." (*Id.* at p. 10.)

We found in the Evansville Order that future Indiana-American purchases from Evansville were not fixed, known and measurable. Nothing in the record of this Cause leads us to disturb that finding. Accordingly, test year should exclude any purchased water costs from Evansville, and pro forma purchased water expense should be decreased by $68,202.

8. Insurance

a) Group Insurance

Petitioner's Position. Petitioner made adjustments for current group insurance costs and costs associated with post-retirement benefits other than pensions ("PBOP"), i.e., Statement of Financial Accounting Standards No. 106 ("FAS106"). Petitioner proposed an increase over test year of $503,075 for group insurance and a decrease of $522,562 for PBOP, for a net decrease of $19,487. Petitioner further reduced test year expenses by shifting certain positions in customer service and corporate to AWWSC, which were offset by increases to "management fees" paid by Petitioner to AWWSC.

OUCC's Position. The OUCC made adjustments consistent with its proposed labor adjustments, including the exclusion of certain vacant and new employment positions and updating the costs for an increase in premiums less the portion paid by the employee. The OUCC accepted Petitioner's adjustment for PBOP/FAS106 costs. The OUCC proposed an increase over test year of $383,826 for group insurance and a decrease of $522,562 for PBOP, for a net decrease of $138,736. The Public also recognized Petitioner's shifting of costs to management fees, as was discussed in the labor portion of this Order. (*See* Sect. XI. B. 1. Pro Forma Labor Positions.)

Petitioner's Rebuttal. Mr. Cutshaw testified that the originally proposed adjustment to PBOP was in error. He stated the pro forma amount should have been $2,043,667, not $1,271,240 as originally filed. Mr. Cutshaw changed the adjustment from ($522,562) to $249,886. Petitioner accepted Ms. Gemmecke's adjustment reflecting group insurance rates effective January 1, 2004, and employee contributions. (*Petitioner's Exhibit JLC-R*, pp. 14-15.)

Commission Discussion and Findings. Petitioner originally requested a decrease of $522,562 to test year PBOP expenses. The Public and Intervenors made no changes to this adjustment to test year expenses. However, Petitioner on rebuttal stated its adjustment was in error and the correct adjustment to test year expense would be an *increase* of $249,866, rather than the originally proposed *decrease* of $522,562.

We find no justification for Petitioner's disparate treatment of pension expense and PBOPs. With the pension expense, Petitioner calculated a six-year pro forma average pension (FAS87) expense. (*Industrial Group's Exhibit 1*, p. 28, lines 11-12.) However, with the PBOP (FAS106) calculation, Petitioner did not calculate an average. Instead, Petitioner took only the 2004 amount of $28,400,000 to calculate Indiana-American's share of the expense.

Mr. Wolf explained the reasoning behind the pension expense average, saying, "[a] six (6) year average was used because recent declines in the financial markets are causing significant

increases in pension costs over the period. Using the average mitigates the short-term impact of recent events." (*Petitioner's Exhibit WJW*, p. 12, lines 1-4.) The same factors of market fluctuation are relevant in determining FAS106 expense as for FAS87 expense. Consequently, we see no justification for Petitioner to treat FAS106 differently.

The Commission finds pro forma group insurance costs to be $112,664 above the test year amount of $4,258,549, before shifting costs to management fees. The amount shifted to management fees is $417,056, consistent with our findings for labor expense.

b) Other Insurance

Petitioner's Position. Petitioner adjusted test year insurance other than group expense by annualizing the current premiums for each type of coverage, including general liability, auto liability and workers' compensation. (*Petitioner's Exhibit BIT*, p. 22, lines 1-4.) This adjustment resulted in an increase in test year expense of $124,458. (*Petitioner's Exhibit BIT, Sched. 6*, p. 1.)

OUCC's Position. OUCC witness Margaret Stull proposed several adjustments increasing test year insurance other than group expense by $14,938. According to the OUCC, Petitioner overstated auto insurance expense by $89,364 and overstated liability insurance by a net $19,714. (*Public's Exhibit 2, Attach. MAS-13.*) Ms. Stull also proposed to eliminate the amortization of retrospective insurance premiums in the amount of $153,264. Ms. Stull noted that Petitioner did not provide any explanation or support as to what these insurance premiums related or how they would benefit future periods and, therefore, warrant multi-year amortization. (*Public's Exhibit 2*, page 18, lines 12-20.)

Petitioner's Rebuttal. Petitioner accepted the adjustments to auto insurance and liability insurance. However, Petitioner opposed the proposed exclusion of the retrospective premiums.

In rebuttal, Petitioner's witness Cutshaw provided a summary of the affected policies and copies of supporting invoices. (See *Petitioner's Exhibit JLC-R9.*) He argued that the retrospective payments are a "true-up" of premiums for prior year policies that Petitioner is paying over a set policy period. Mr. Cutshaw further claimed that the amounts reflected by the Company were incurred in the test year and will be incurred beyond the adjustment period provided in the Prehearing Conference Order in this case. (*Petitioner's Exhibit JLC-R*, p. 24, lines 10-15.) Mr. Cutshaw alleged that retrospective premiums have been accepted by the OUCC and approved by the Commission in Petitioner's last four rate cases (Cause Nos. 42029, 41320, 40703 and 40103). (*Id.* at lines 20-24.)

Commission Discussion and Findings. First, we find that the insurance adjustments for auto insurance and liability insurance, which were accepted by Petitioner, should be approved.

Second, as to retrospective premiums, we have reviewed our rulings in Petitioner's four (4) previous rate cases and do not see any specific mention or acceptance of retrospective insurance premiums as stated by Petitioner in its rebuttal testimony.

That being said, we do not think that there is enough information on the record to disallow these retrospective insurance premium expenditures. We will allow these costs to be included in test year for this rate case, but emphasize that this issue is not closed to future examination in subsequent cases. Indeed, we encourage a more thorough investigation of these costs by the OUCC in Petitioner's next rate case.

9. Internal Audit

OUCC's Position. Ms. Lynn reduced Petitioner's management fee expense by $56,572 for the Internal Audit Division of an affiliated company. She based her adjustment on Petitioner's response to OUCC Data Request No. 3, Question 51, in which Petitioner stated that the Internal Audit Division had not performed an internal audit for Petitioner in over three (3) years. (*Public's Exhibit* 3, p. 32.)

Petitioner's Rebuttal. Petitioner's witness Wolf testified that Petitioner and its ratepayers receive benefits from the American Internal Audit department because the department does more than direct internal audits. (*Petitioner's Exhibit WJW-R*, p. 2, lines 9-10.) He stated that, in addition to performing periodic internal financial audits, the Internal Audit department assists with the annual independent audit performed by PricewaterhouseCoopers (thereby reducing audit fees allocated to Petitioner), performs reviews of Information Technology Services processes and procedures, reviews SCADA system security and administers Petitioner's Code of Ethics. (*Petitioner's Exhibit WJW-R*, p. 2, lines 11-21.)

Commission Discussion and Findings. We reviewed Public's Exhibit 3, Attachment DML-11, which contained the complete question and answer to the discovery question the Public relied upon as its basis for the adjustment:

> Q-51: Please describe any and all internal audits, review, cost/benefit analyses, assessments or evaluations ("audits") of any aspect of Petitioner's operations performed in the last three years. Also, please state who performed the audit, the length of the document and whether the audit is complete.
>
> Response: . . . .Without waiver of its objections, Indiana-American states that it has no internal audits for the referenced period. Indiana-American further states that it prepared comprehensive planning studies during the referenced period. Such studies were prepared under the supervision of Alan J. DeBoy. Copies of the comprehensive planning studies will be made available for inspection at its corporate office.

We note that this data request by the OUCC was not just a request for the internal audits that had been performed. Certainly, Mr. Wolf's rebuttal on this subject claims that the affiliated company's Internal Audit division performed audit tests for Indiana-American and a review of Indiana-American's corporate-wide Information Technology Services processes and procedures.

However, despite being clearly within the scope of the OUCC's request, no reference to, or documentation of these "internal audits, review, cost/benefit analyses, assessments or evaluations" was provided to the OUCC. Indeed, beyond Mr. Wolf's passing assertion of their existence in his rebuttal testimony, there is no documentation whatsoever of these activities in the record of this case. (*Petitioner's Exhibit WJW-R*, p. 2, lines 16-21.)

We note that under the Commission's procedural rules, discovery is designed to be self-executing, and parties should be able to rely on the completeness of other parties' responses. (*See,* 170 IAC § 1-1.1-16 (2000).) Furthermore, Indiana courts have addressed the issue of inferences that may be drawn from a party's failure to provide evidence within that party's exclusive control, as follows:

> In Indiana, the exclusive possession of facts or evidence by a party, coupled with the suppression of the facts or evidence by that party, may result in an inference that the production of the evidence would be against the interest of the party which suppresses it. . . . The rule not only applies when a party actively endeavors to prevent disclosure of facts, but also when the party "merely fails to produce available evidence."

Porter v. Irvin's Interstate Brick & Block Co., Inc., 691 N.E.2d 1363, 1364-65 (Ind. Ct. App. 1998)(quoting *Morris v. Buchanan*, 220 Ind. 510, 44 N.E.2d 166, 169 (1942)).

Clearly, Petitioner's records are within Petitioner's exclusive control. Furthermore, OUCC witness Lynn appropriately raised questions regarding the purposes for which Petitioner was billed by its affiliate's Internal Audit division. Therefore, without documentation of these management fees Petitioner paid to its affiliate's Internal Audit division, we may infer that these fees are properly counted as expenses in the provisioning of utility service. Consequently, we find that Petitioner should reduce its test year management fees by $56,572 for its affiliates Internal Audit Division.

We will incorporate this reduction into Petitioner's adjustment for management fees in Section XI. B. 16.

10. Employee Investment Plan

OUCC's Position. OUCC witness Judith Gemmecke challenged the amount of Petitioner's adjustment for 401(k) expense, the Employee Investment Plan ("EIP") and temporary employment services. (*Public's Exhibit 1*, p. 22, lines 2-17.) Ms. Gemmecke objected to the inclusion of the EIP in rates because the Internal Revenue Service had not issued a determination letter qualifying the contributions to the plan as deductible for tax purposes and, if the plan is found not to be deductible, the company will be able to recover all contributions made. (*Id.* at lines 10-13.) Consequently, Ms. Gemmecke asserted the EIP expense was not fixed in time or known to occur because the company may be able to reclaim the money put into the EIP accounts. (*Id.* at lines 14-16.)

Petitioner's Rebuttal. Mr. Cutshaw disagreed with Ms. Gemmecke, testifying that Petitioner's contributions to the EIP are fixed, known and measurable. (*Petitioner's Exhibit JLC-R*, p. 17, line 16 through p. 18, line 6.) Mr. Cutshaw testified that delays in obtaining a determination from the Internal Revenue Service are not uncommon and attached Petitioner's Exhibit JLC-R7, a copy of a letter from Petitioner's law firm opining that the EIP qualifies for special tax treatment, to his testimony. (*Id.* at lines 20-23.) Mr. Cutshaw noted that the EIP replaced Petitioner's Employee Stock Ownership Plan ("ESOP") which has been included in Petitioner's recoverable expenses for many years. (*Id.* at p. 17, line 23 through p. 18, line 1.) Although the tax deductibility of the contributions is not yet resolved, Mr. Cutshaw argued that Petitioner has made and continues to make contributions to the EIP and that these payments are fixed, known and measurable. (*Id.* at p. 18, lines 1-6.)

Commission Discussion and Findings. We have previously noted that "[t]his Commission is bound in making adjustments to a standard that those adjustments must be sufficiently fixed, known and measurable, and therefore likely to occur, for ratemaking purposes." (*Indiana Gas Company, Inc.*, Cause No. 38080, 86 PUR4th 241, 255 (IURC September 18, 1987).) Ms. Gemmecke's challenge to Petitioner's contributions to the EIP is not that those contributions cannot be determined with sufficient specificity, but instead goes to the likelihood of the expenses' occurrence. While the IRS may not yet have determined that the EIP will qualify for tax benefits, Petitioner has established that it is likely that the plan will receive a favorable ruling from the IRS. We therefore reject the OUCC's proposal to remove the cost of Petitioner's contributions to the EIP from its expenses.

11. Maintenance Expenses

Petitioner's Position. Petitioner's witness Tapp proposed an adjustment for certain maintenance items to be completed during the twelve-month adjustment period. He itemized each of the maintenance efforts, which included:

(1) Southern Indiana: well cleaning, parking lot sealing, chlorine maintenance, easement maintenance and printing;

(2) Richmond: parking lot sealing and valve maintenance and repairs;

(3) Seymour: painting and sector cleaning;

(4) Shelbyville: residuals removal and painting;

(5) Wabash Valley: well cleaning and generator maintenance; and

(6) Warsaw: well cleaning

The total proposed adjustment is $270,100.

OUCC's Position. OUCC witness Stull excluded all of the proposed pro forma adjustments from Petitioner's maintenance expenses. (*Public's Exhibit 2*, p. 19, lines 21-23.) Ms. Stull testified that these additional costs were requested in addition to the test year maintenance expense ($2,620,679), but the Petitioner did not adequately support the need for this amount with schedules or work papers. (*Id.* at p. 21, lines 8-11.)

Petitioner's Rebuttal. In rebuttal, Petitioner's witness Cole disagreed with the Public's proposal to exclude all pro forma adjustments to the Company's maintenance expenses. He explained that a decision was made to reduce the Company's maintenance in 2003 by more than $300,000 in the areas of well cleaning, residuals removal and other areas. He explained that this was done because the maintenance could be briefly delayed without impacting water quality and because the Company was anticipating budgetary constraints. (*Petitioner's Exhibit DDC-R*, p. 10, lines 15-17.) Mr. Cole further explained that continued delivery of water supply and delivery of service requires the reinstatement of maintenance that was curtailed in 2003. For example, the well cleaning, included in the $270,000 adjustment, commenced in March 2004 and will be completed in May 2004 in preparation for upcoming water demands in Summer 2004. All of the other delayed maintenance will be completed during the adjustment period. (*Id.* at p. 10, line 18 through p. 11, line 2.)

Commission Discussion and Findings. We find that the OUCC's proposal to omit all adjustments to the Petitioner's maintenance expense should be rejected. The Petitioner has sufficiently explained why the test year maintenance expenses were reduced in 2003 and why it is necessary to reinstate maintenance expenses that have been curtailed. We further find that these expenses are required for the Petitioner's continuous provision of quality service to Indiana customers and that this amount should not be excluded.

12. Regulatory Expenses

Petitioner's Position. Petitioner proposed to amortize its estimated regulatory expense over a thirty-month period, resulting in a proposed adjustment to increase the test year level by $65,268. (*Petitioner's Exhibit JLC-3, Sched. 3.*)

OUCC's Position. The OUCC agreed with Petitioner's thirty-month amortization period but proposed an adjustment to increase test year regulatory expenses by only $51,268. (*Public's Exhibit 2,* p. 10, lines 21–22.)

OUCC witness Stull evaluated the support provided by Petitioner for the various types of estimated regulatory expenses it was proposing, including legal fees and consultant fees for a cost of capital study and a cost of service study. Ms. Stull determined that the support provided was reasonable and agreed with Petitioner's estimated costs for these expenses. However, Petitioner did not provide any support for its estimates of customer notification costs and other miscellaneous expenses. Consequently, Ms. Stull compared Petitioner's estimates in this case to costs incurred in its prior rate case and determined that customer notification expenses appeared reasonable but that other miscellaneous expenses did not. (*Id.* at lines 17-20.) Ms. Stull requested, through an on-site data request, further details regarding Petitioner's estimate of other miscellaneous costs but she received no response. (*Id.* at lines 11-17.) Based upon the limited information available to the OUCC, Ms. Stull recommended that Petitioner's miscellaneous regulatory expense be reduced from $45,000 to $10,000, the level of expenses incurred in Petitioner's prior rate case for this category of costs. (*Id.* at lines 9-11.)

Petitioner's Rebuttal. Petitioner claimed that the miscellaneous expense estimate of $45,000 was reasonable. (*Petitioner's Exhibit JLC-R,* p. 15, lines 10-24.) In fact, Mr. Cutshaw alleged that the costs incurred as of the time his rebuttal testimony was filed had actually

exceeded Petitioner's original estimate by $12,000. (*Id.* at p. 16, lines 1-3.) Mr. Cutshaw also provided the support for the expenses included in this category as Petitioner's Exhibit JLC-R5 and explained the costs that had been incurred. The explanation Mr. Cutshaw offered as to why the supporting information for other miscellaneous regulatory expense was not provided to the OUCC was that the request was overlooked.

Mr. Cutshaw further claimed that total estimated regulatory expense had increased. The costs for customer notification had increased by $24,000 from the previous estimate. Further, he claimed that Petitioner had not originally anticipated retaining Mr. Van den Berg to testify and that the cost of service study and associated discovery were underestimated by approximately $12,500. Mr. Cutshaw did not discuss the status of expenditures related to legal costs or the cost of capital study.

Commission Discussion and Findings. It appears that some of the documents supporting Petitioner's miscellaneous regulatory expenses were not provided until its rebuttal evidence was filed. We are, again, concerned with Petitioner's lack of responsiveness to the OUCC. Nonetheless, we accept Petitioner's proposed pro forma regulatory expense as requested in its case-in-chief but do not accept the increased costs presented in Petitioner's rebuttal testimony. These expenses should have been presented in Petitioner's case-in-chief. Because they were not, the OUCC and Intervenors were not given adequate opportunity to review these additional costs. Further, no update was provided for legal costs, which is a substantial portion of the overall costs, or for the cost of capital study.

While Petitioner has presented evidence that certain categories of expense have increased in the intervening period between the filing of Petitioner's direct and rebuttal testimonies, we have only estimates as to the remaining expenses. Consequently, we have insufficient evidence to determine with any degree of certainty that the overall level of regulatory expense has increased. Consequently, we find Petitioner's test year regulatory expense adjustment should be limited to the amount requested in Petitioner's case-in-chief, $65,268.

13. General Office Expenses

OUCC's Position. The OUCC proposed an adjustment to reduce Petitioner's general office expense by $54,907, by removing the amortization of a prior period short-term line-of-credit fee which did not appear to be a recurring expense. (*Public's Exhibit 2*, p. 23, lines 3-9.) The OUCC also proposed to eliminate from this category of expense $4,146 for a meter restocking fee which it believed was not reasonably necessary. (*Id.* at lines 10-14.)

Petitioner's Rebuttal. Petitioner accepted the disallowance of the meter restocking fee but submitted evidence that the short-term line-of-credit fee was recurring. Petitioner's witness Wolf alleged that the fee is incurred on an annual basis to maintain a syndicated line-of-credit used to provide short-term financing for Petitioner's borrowing needs. Mr. Wolf testified that the fee was incurred and paid in August 2003 to continue the line of credit. (*Petitioner's Exhibit WJW-R*, p. 17, lines 5-15.)

Commission Discussion and Findings. The basis for the OUCC's proposed adjustment to general office expense was that the fee attributable to short-term debt expense was nonrecurring. Petitioner provided testimony demonstrating that this fee was in fact recurring. Based on Petitioner's testimony, we find that the OUCC's proposed adjustment to remove $54,907 of short term debt fees should be rejected.

14. Taxes

a) Property Tax

Originally there was considerable disagreement by Intervenor Schererville with the calculation of pro forma property taxes. Petitioner originally proposed an adjustment to increase test year expense by $2,466,662. (*Petitioner's Exhibit WJW-1-U, Sched. 4.*) This amount was calculated using the most recent assessed values and most recent property tax rates available. Intervenor witness Sommer opposed the adjustment because he believed the effect of the recent statewide reassessment would produce significantly lower property tax rates in the Northwest district. By the time of the final hearing, updated property tax rates were available for all counties where Petitioner has taxable property with the exception of Clark County. With the new rates, Petitioner recomputed its pro forma property taxes and reduced the proposed adjustment by $2,302,851. (*Petitioner's Exhibit WJW-1-L, Sched. 2.*) We approve the Petitioner's adjustment as no party opposed the recalculated pro forma property taxes.

b) Utility Receipts Tax

Both Petitioner and the OUCC made an adjustment for utility receipts tax based upon their respective calculations of pro forma revenues. However, OUCC witness Gemmecke reduced taxable receipts by the amount of pro forma wholesale sales. On rebuttal, Petitioner's witness Cutshaw agreed with Ms. Gemmecke's exclusion of such revenue from the calculation. The Commission is in agreement with this calculation methodology and has applied the same in determining the utility receipts tax.

c) Income Tax

OUCC's Position. The OUCC proposed one adjustment to Petitioner's method of calculating state income taxes. Ms. Gemmecke has deducted parent company interest as well as synchronized interest as tax-deductible interest expense. She states that interest expense is a proper business deduction to both federal and state taxable income. Indiana state tax begins with federal taxable income, which includes the deduction for interest expense.

Petitioner's Rebuttal. Petitioner opposed Ms. Gemmecke's proposal to treat any parent company interest expense as tax deductible for state income tax purposes. (*Petitioner's Exhibit WJW-R*, p. 25, lines 6-10 and lines 18-22.) As explained by Mr. Wolf, the allocation to Petitioner of a share of its of parent company interest expense in the federal income tax calculation was made in accordance with the procedure set forth in the Commission's Supplemental Order On Remand dated September 16, 1981, in Muncie Water Works Company, Cause No. 34571. (*Id.* at lines 10-18.) As explained in that Order, the parent company interest allocation is intended to reflect for ratemaking purposes the benefits of Petitioner joining in a

consolidated federal income tax return. For this reason, the Order in Cause No. 34571 did not allocate parent company interest in the state income tax calculation. (*Id.* at lines 18-20.) Mr. Wolf testified that Petitioner does not file a consolidated state income tax return and, therefore, derives no benefits from the parent company interest. (*Id.* at lines 18-22.)

Commission Findings. We accept Petitioner's methodology to calculate pro forma state income taxes. The OUCC's proposal to deduct parent company interest in the state income tax calculation is rejected. We rejected this same proposal from the OUCC in our Supplemental Order on Rehearing in Cause No. 38880. (*Ind.-Am. Water Co.,* Cause No. 38880 (Indiana Utility Regulatory Commission, Date Issued Nov. 28, 1990).) We noted in that Order that "the Commission's calculation of state income taxes in the [34571] Order did not treat the parent company interest as tax deductible for state income tax purposes." (*Id.* at p. 7.) This conclusion is likewise valid in this proceeding because Petitioner does not file a consolidated state income tax return.

15. GIS Expenses

OUCC's Position. Ms. Stull proposed to reduce miscellaneous expense by $40,180 to remove the accrual of costs for "GIS" services. (*Public's Exhibit 2*, p. 28, lines 14-16.) Ms. Stull also indicated that Petitioner accrued $50,000 for GIS services during the test year but had reversed $9,820 of this accrual in March 2003. (*Id.* at lines 19-22.) Ms. Stull concluded that the remaining $40,180 accrued for GIS services was either not necessary for the test year or should have also been reversed and that miscellaneous expense was, therefore, over-stated. (*Id.* at p. 28, line 19 through p. 29, line 2.)

Petitioner's Rebuttal. Mr. Wolf testified that it would be inappropriate to remove the accruals recorded to miscellaneous expense for GIS services. Mr. Wolf explained that Ms. Stull incorrectly assumed that Petitioner's reversal of a portion of these costs meant that the remaining amount should be disallowed. Mr. Wolf testified that the partial reversal was a result of a change in Petitioner's accounting for this expense. Petitioner has historically handled these expenses by first accruing them to a liability account and then processing invoices against the accrual. (*Petitioner's Exhibit WJW-R*, p. 18, lines 20-22.) Mr. Wolf testified that Petitioner ceased accruing the cost in March 2003 and reflected this change by adjusting the liability account to zero and crediting $9,820 to expense. (*Id.* at p. 18, line 23 through p. 19, line 4.) Mr. Wolf stated that the Petitioner had actually incurred $73,573 in expenses to this contractor, but had only booked $47,190 as a result of this accounting change. (*Id.* at p. 19, lines 4-6.)

Commission Discussion and Findings. According to the testimony of Mr. Wolf, the accrual process was streamlined during the test year and this accrual does, in fact, represent actual expenses incurred by Petitioner. Petitioner has explained the changes and demonstrated that these costs are not being counted twice. Consequently, we disallow the OUCC's adjustment.

16. Management Fees

Petitioner's Position. Petitioner proposes to increase management fees from test year amounts of $5,361,157 to a pro forma amount of $10,130,448. This increase consists of a 4%

increase in the labor portion of management fees, the annualized cost of a Vice President of Finance position plus a shifting of costs from direct expenses and of certain Indiana-American corporate personnel.

OUCC's Position. We previously accepted the OUCC's adjustment to eliminate $56,572 of charges for internal audits which were not performed. (*See,* Sect. XI. B. 9. Internal Audits.) This expense is an allocation from AWWSC. Ms. Stull made additional adjustments for non-recurring expenses related to a cancellation fee and a legal settlement. Ms. Stull also eliminated certain costs that the OUCC alleges provide no material benefit to ratepayers, including investor relations, lobbying costs, charitable contributions and a public relations contract. In addition, she made an adjustment for a three-year maintenance agreement which was fully expensed within the test year. Ms. Stull had concerns regarding management fees, stating she could only conduct a limited review and that information was difficult and time-consuming to obtain. Ms. Gemmecke confirmed that source documents for management fees were not as forthcoming as desired. In addition, she remarked that office rental expense, which is being shifted from a direct corporate expense to a management fee expense, is for excessive space. She also made adjustments for the elimination of incentive pay (paid through management fees). Finally, Ms. Gemmecke made adjustments to labor and benefits expenses which have an impact on the dollar amounts being shifted to management fees. Mr. Pettijohn, while not proposing an adjustment, commented on the amount of research and development charges which were being allocated to Indiana-American through management fees.

Petitioner's Rebuttal. Petitioner agreed to part of Ms. Stull's adjustment for lobbying expense, but also disagreed in part. Petitioner's witness, Mr. Wolf voiced his disagreement with the disallowance of $13,894 from the Corporate Communications Department, as this department helps prepare press releases and speeches. (*Petitioner's Exhibit WJW-R*, p. 4.) Mr. Wolf also categorizes the research and development charges as the American Water System Research Program and membership in AWWARF.

Commission Discussion and Findings. Petitioner is slowly moving its direct expenses to its service company where costs for all its affiliates are accumulated and then allocated as management fees. AWWSC is the hub of all accounting, administration, engineering, financing and customer service functions and most management functions. The only direct management salaries are those in the positions of management for each water treatment/delivery system. In addition, the AWWSC acts as a flow-through entity for charges from the Belleville Lab and the Customer Satisfaction Center.

Petitioner disputes neither the OUCC's elimination of charitable contributions, investor relations or certain lobbying expenses, nor the adjustments for non-recurring items or the maintenance agreement contract. Petitioner goes to great lengths describing the benefits of the Corporate Communications Department, but the OUCC has not eliminated the costs of this department; instead it has eliminated the costs related to a particular vendor that provides public relations services for Petitioner. Petitioner provided no evidence in rebuttal to show that this vendor's activities provided any material benefit to ratepayers, so we find that these costs should be eliminated.

Petitioner also discussed at length the benefits of the government affairs department. The standard for including these types of expenses in rates has been whether the expenditures provide a specific, material benefit to the ratepayers. Petitioner has failed to demonstrate any such benefit, so we find that these costs should be eliminated.

As a result, total management fees allowable in rates equals $8,992,386.

17. Other Expenses

Petitioner's Position. Petitioner includes several adjustments under this heading. Adjustments to test year expense included the labor-related costs of the 401(k) and Employee Investment Plan (*see,* Sect. XI. B. 10.), the "Call Before You Dig" program, the write-off of deferred expenses from the Shared Services Initiative and an increase of security expenses. Petitioner filed supplemental testimony on February 20, 2004, to reflect the determination in our December 30, 2003 Order on security costs in Cause No. 42029. The adjustment for security expense will be discussed separately below. (*See,* Sect. XI. B. 18.) Petitioner then shifts some of the miscellaneous expenses to management fees.

OUCC's Position. OUCC witness Gemmecke challenged the amount of Petitioner's adjustment for 401(k) expense, the EIP and temporary employment services. The amount of 401(k) expense is tied to the pro forma labor expense recommended by the OUCC in this Cause. Ms. Gemmecke makes an additional adjustment to eliminate temporary employment services which were included in the test year. This was done because full-employment was allowed in labor expense.

OUCC witness, Margaret Stull agreed with Petitioner's adjustment removing a one time write-off of costs associated with the Shared Services Initiative. She also agreed with the adjustment to annualize costs associated with the "Call Before You Dig" program. Ms. Stull made additional reductions to test year miscellaneous expense for charitable contributions, advertising costs, community relations expense and lobbying expenses. Ms. Stull provided a detailed listing of items included in her adjustments. Corrected testimony was submitted by Ms. Stull on April 15, 2004, wherein she adjusted her advertising expense reductions in light of Petitioner's rebuttal testimony on this subject. In addition, Ms. Stull made adjustments to reverse accrued expenses recorded during the test year where no actual expenses were recorded to off-set these reserves during the test year. The adjustment to reverse GIS contract services is discussed under Operating Expenses, GIS Expense. (*See,* Sect. XI. B. 15.) The OUCC agreed with the shifting of costs from Indiana-American's miscellaneous expense to management fees, however, due to some of the adjustments indicated above, the amount of reduction to miscellaneous expense varies from that proposed by Petitioner.

Petitioner's Rebuttal. Mr. Wolf discusses the miscellaneous expense adjustments of advertising expense, accrued expense and lobbying expense. He does not agree with the full amount of Ms. Stull's exclusion of advertising cost. He states that part of the $54,508 in advertising expenses that Ms. Stull reduced in test year level of expense did provide a benefit to the ratepayers. He indicated that $7,691 of cost was incurred for hydrant flushing notification

and $17,809 was incurred for employment classified ads. Later in his rebuttal testimony he states his belief that lobbying expense provides a material benefit to the ratepayer.

Commission Discussion and Findings. There are a variety of issues which have been placed in "Other Expenses." We will discuss each adjustment that was contested by either party.

401(k) Expense. Both Petitioner and the OUCC propose an increase in 401(k) expenses. This expense is directly tied to the findings under labor expense. Consistent with the findings in labor expense, we now find the increase to test year 401(k) expense to be $45,403, and the amount of costs shifted to management fees is $2,600 for customer service associates and $19,063 for Indiana-American corporate employees who will be employees of AWWSC on a pro forma basis.

Advertising. While Mr. Wolf did not detail which invoices he believed had a benefit to ratepayers, he did testify as to amounts for hydrant flushing notification and employment advertising, thus leaving $29,008 which Petitioner did not contest removing from test year expenses to obtain a pro forma amount of advertising expense. The OUCC corrected its testimony and schedules to reflect the same. The Commission now finds test year advertising to be overstated by $29,008 for pro forma expense.

Charitable Contributions. The OUCC proposed adjusting test year expenses to eliminate charitable contributions for ratemaking purposes. This adjustment was unopposed by Petitioner. Consequently, the Commission accepts the OUCC's adjustment.

Community Relations. The OUCC proposed adjusting test year expenses to eliminate items related to Community Relations. This adjustment was unopposed by Petitioner. Consequently, the Commission accepts the OUCC's adjustment.

Lobbying Expense. The OUCC proposed the removal of lobbying expenses from Operations and Maintenance expenses for ratemaking purposes. Petitioner opposed the removal, stating that some of the expense was for the lobbying efforts of a membership trade association. As we have found in previous orders for this company, lobbying expenses are not includable in rates unless they can be found to have a specific, material benefit to the ratepayers which can be expected to occur during the period in which the rates being considered are applied. Petitioner did not provide evidence regarding any specific, material benefit to ratepayers and, therefore, the Commission finds the OUCC's adjustment should be approved.

Accrual Reversals. The OUCC has proposed excluding amounts recorded on Petitioner's books from the accrual of customer survey costs. Petitioner did not rebut this adjustment. Consequently, the Commission finds the OUCC's adjustment relating to the customer survey accrued expense should be approved.

18. Security Costs

Petitioner's Position. Petitioner adjusted test year expenses to include $1,918,070 for security costs. (*Petitioner's Exhibit JLC-3-U, Sched. 4.*) This amount included annual amortization of deferred security costs in the amount of $572,742 and $1,345,328 of on-going

annual expenses. Deferred security costs are being amortized over a five (5) year period. Petitioner's witness Cutshaw testified that these amounts were based upon the Commission's December 30, 2003 Order on Security Costs in Cause No. 42029. (*Petitioner's Exhibit JLC-U*, p. 5, lines 20-24 through p. 6, lines 1-6.)

OUCC's Position. OUCC witness Margaret Stull asserted that it is not clear from the Order issued in Cause No. 42029 what security costs have been approved by the Commission to be recovered by Petitioner. Due to confidentiality issues, the Order does not provide specifics regarding the composition of the costs approved, what or whether deferred costs can be recovered, or over what period these deferred costs should be recovered. (*Public's Exhibit 2*, p. 25, lines 14-23.) Since the hearing on this issue in Cause No. 42029, Petitioner's annual costs have decreased steadily from approximately $1.8 million to $1.3 million. In Cause No. 42029, Petitioner requested total annual security costs of $2,454,027, and the Commission approved $2,062,871. If the Commission did not intend for Petitioner to recover all of its current or deferred costs or intended for Petitioner to recover deferred costs over a longer period of time, then Petitioner would be over-recovering these costs based on its current test year adjustment. (*Id.* at p. 26, lines 9-15.) The OUCC alleged that it did not make an adjustment to Petitioner's pro forma expenses because there was insufficient information on which to base an adjustment, but did ask the Commission for clarification on this issue. (*Id.* at p. 27, lines 1-5.) The OUCC also expressed concern that, if the Commission has not approved recovery of all of the deferred costs, there is an issue of retroactive ratemaking. (*Id.* at p. 26, lines 18-22.)

Petitioner's Rebuttal. Mr. Cutshaw maintained that the Commission's Order on Security Costs authorizes it to amortize deferred costs. Mr. Cutshaw based his opinion on the fact that the Order adopted a revenue requirement that was greater than Petitioner's annual current on-going security expenditures identified and because of the language in the Order's first ordering paragraph stating that the revenue requirement is without carrying charges. (*Petitioner's Exhibit JLC-R*, p. 18, lines 25-29.) Mr. Cutshaw alleged that this language would not be necessary if the Commission was not approving the regulatory asset created by the deferral of security costs incurred prior to the Order. Mr. Cutshaw also argued that allowing amortization of the deferred security costs does not represent retroactive ratemaking if full recovery of these expenses in future revenues is anticipated. (*Id.* at p.19, lines 6-13.)

Commission Discussion and Findings. We first address the retroactive ratemaking issue raised by the Public. Security measures benefit the ratepayers at the time they were expensed and going forward. The Commission hereby clarifies that the amortization of the deferred security expenses over a five (5) year period is authorized consistent with our December 30, 2003 Order in Cause No. 42029.

With regard to Petitioner's proposed level of security expenses in this proceeding, we notice that the annual expense has decreased from $2,062,871 in Cause No. 42029 to the proposed $1,918,070. No other party offered evidence contradicting this amount. We find that the proposed amount is reasonable and should be authorized.

XII. NET OPERATING INCOME AT PRESENT RATES

Based upon the evidence and the determinations made above, we find that Petitioner's adjusted operating results under its present rates are as follows:

	Total Company	Water Groups	Wabash	Total Sewer	Northwest
Operating Revenue	$139,380,203	$88,529,107	$1,865,785	$294,229	$40,641,293
O & M Expense	52,219,786	31,763,606	923,379	278,877	15,606,943
Depreciation	21,748,977	15,661,330	307,339	18,938	4,531,314
Amortization	422,740	351,991	3,292	1,224	52,698
Other Taxes	16,224,846	7,852,813	154,878	14,442	7,487,584
State Income Tax	3,106,091	2,126,055	29,531	(2,731)	789,876
Federal Income Tax	10,315,740	7,078,790	91,390	(12,514)	2,612,823
Total Operating Expenses	104,038,180	64,834,585	1,509,809	298,236	31,081,238
Net Operating Income	$35,342,023	$23,694,522	$355,976	($4,007)	$9,560,055

	Mooresville	Warsaw	West Lafayette	Winchester
Operating Revenue	$1,564,389	$2,248,099	$3,412,019	$825,284
O & M Expense	673,334	951,508	1,621,555	400,584
Depreciation	218,803	308,509	560,904	141,840
Amortization	2,590	2,921	6,583	1,441
Other Taxes	132,858	178,233	325,478	78,563
State Income Tax	36,442	56,503	58,546	11,870
Federal Income Tax	123,962	191,225	192,794	37,272
Total Operating Expenses	1,187,989	1,688,899	2,765,860	671,570
Net Operating Income	$376,400	$559,200	$646,159	$153,714

In summary, we find that with appropriate adjustments for ratemaking purposes, Petitioner's annual net operating income under its present rates for water and sewer service would be $35,342,023. We have previously found that the fair value of Indiana-American's utility property is approximately $663,400,000, and that 5.38% is a fair rate of return, resulting in a NOI level of $35,669,628. A return of $35,342,023 represents a rate of return of 5.33% on the fair value rate base. Based on the evidence, we find that 5.33% is not a reasonable return and, therefore, we find that Petitioner's present rates are insufficient.

XIII. AUTHORIZED RATE INCREASE

Based on the evidence presented in this proceeding, we find that Petitioner should be authorized to increase its rates and charges to produce additional operating revenue of $564,801, resulting in total annual revenue of $139,945,004. This revenue is reasonably estimated to allow Petitioner the opportunity to earn net operating income of $35,669,628 as follows:

	Total Company	Water Groups	Wabash	Total Sewer	Northwest
Operating Revenue	$139,945,004	$91,061,068	$1,967,065	$314,857	$38,739,937
O & M Expense	52,224,577	31,785,081	924,238	279,052	15,590,817
Depreciation	21,748,977	15,661,330	307,339	18,938	4,531,314
Amortization	422,740	351,991	3,292	1,224	52,698
Other Taxes	16,233,302	7,890,722	156,394	14,752	7,459,117
State Income Tax	3,153,640	2,339,211	38,057	(995)	629,807
Federal Income Tax	10,492,142	7,869,587	123,022	(6,072)	2,018,980
Total Operating Expenses	104,275,376	65,897,922	1,552,342	306,899	30,282,733
Net Operating Income	$35,669,628	$25,163,146	$414,723	$7,958	$8,457,204

	Mooresville	Warsaw	West Lafayette	Winchester
Operating Revenue	$1,503,374	$2,058,158	$3,459,305	$841,254
O & M Expense	672,816	949,897	1,621,956	400,720
Depreciation	218,803	308,509	560,904	141,840
Amortization	2,590	2,921	6,583	1,441
Other Taxes	131,944	175,389	326,187	78,802
State Income Tax	31,305	40,512	62,527	13,215
Federal Income Tax	104,906	131,902	207,562	42,260
Total Operating Expenses	1,162,364	1,609,130	2,785,719	678,278
Net Operating Income	$341,010	$449,028	$673,586	$162,976

XIV. COST OF SERVICE STUDY AND SINGLE TARIFF PRICING

Petitioner's Position. Kerry A. Heid, an independent rate consultant, conducted Petitioner's Cost of Service Study ("COSS") using the American Water Works Association's ("AWWA's") Base-Extra Capacity Method to allocate costs of service to customers. Mr. Heid testified that under the Base-Extra Capacity Method, the costs are allocated to cost functions according to the design and operation of the water system: base, extra capacity, customer and direct fire protection costs. Those functionalized costs are then allocated to the different classes of Petitioner's customers according to their usage and demand characteristics. These classes are: residential, commercial, industrial-large, industrial-other, public authority, sales for resale, private fire protection and public fire protection.

As a result of the COSS, Mr. Heid designed rates that recover revenues from each customer class which closely match the cost of providing service to each customer class. Mr. Heid conducted his study on a company-wide basis and not on a regional or district operational basis. Such approach resulted in a unified set of rates for each customer class statewide known as Single Tariff Pricing ("STP"). Petitioner is moving toward this goal of STP in phases, as authorized in our 1997 Rate Order and subsequent Orders. Prior to our 1997 Rate Order, Petitioner had thirteen (13) separate water rate schedules exclusive of the later acquired Northwest, United Water and other smaller systems. The Wabash district was excluded from the STP movement for a period of five (5) years, which expired in this proceeding. The original United Water system consisted of four (4) separate rate schedules. In this proceeding, Petitioner is proposing two (2) water groups in addition to Wabash, Northwest and United Water. Petitioner proposed to move the Wabash, Northwest and United systems closer toward STP in this proceeding.

OUCC's Position. In testifying for the Public regarding Petitioner's COSS, Scott Bell recommended that Petitioner:

> (1) allocate the "Capitalized Tank Painting" by Allocation Factor 4 rather than allocation Factor 9 to be consistent with the allocation of "Distribution Reservoirs and Standpipes." Similarly, he recommended that "Accumulated Amortization-Tank Painting" be allocated by Allocation Factor No. 4.
>
> (2) use capacity factors for Maximum Day and Maximum Hour for the residential customer class of 250 and 325 respectively, instead of 275 and 350 as proposed by Mr. Heid.
>
> (3) correct the Equivalent Hydrant Ratios that were used to calculate the Equivalent Hydrant Units in its next COSS. (*Public's Exhibit 8*, p. 16.)

Intervenor's Position. Ernest Harwig, a consultant in the field of public utility regulation, testified on behalf of the Industrial Group. Mr. Harwig differed with Mr. Heid on the classification of two (2) items with respect to the Northwest District: reservoir costs and purchased power expenses. Mr. Harwig recommended that the reservoir costs are more appropriately classified as Maximum Day Extra Capacity costs and that all purchased power

expenses should be classified as Maximum Day and Maximum Hour Extra Capacity costs. Mr. Harwig argued that if the total volume of a particular source of supply is the only factor to be considered then all source of supply would be classified with the Base-only factor. Hence, the Base-Maximum Day classification is more appropriate and accurate.

With respect to the reservoir costs, Mr. Harwig opined that sources of supply are capable of meeting both total annual volume and Maximum Day Demands. As for the power expenses, Mr. Harwig asserted that pumps must have adequate capacity and be in sufficient number to deliver water during peak periods as well during non-peak periods. With respect to these two items, Mr. Harwig suggested that Mr. Heid use the Maximum Hour-All Allocation Factor No. 4 rather than the Base-only factor.

Mr. Harwig finally recommended that, if Petitioner is granted the rate increase it seeks, the Commission should approve Petitioner's single tariff rates for the Northwest District and not phased-in rates, since the Northwest District was impacted the most by the most recent rate increase in Cause No. 42029 and those customers have not yet benefited from STP.

Petitioner's Rebuttal. In his rebuttal testimony, Mr. Heid accepted all of Mr. Bell's recommendations except for one recommended modification to the Equivalent Hydrant Ratio. Mr. Heid testified that Petitioner would agree to change the Equivalent Hydrant Ratio in its next COSS as recommended by Mr. Bell unless Petitioner can demonstrate that such a change would not be in the public interest. If such a demonstration can be made, Mr. Heid suggested that the Company retain the flexibility needed to implement the correct factors in a phased, or other, approach.

With regard to Mr. Harwig's testimony on behalf of the Industrial Group, Mr. Heid did not accept Mr. Harwig's recommendations and explained that following such recommendations would result in more costs being allocated to residential customers and fewer costs allocated to industrial customers. In refuting Mr. Harwig's arguments, Mr. Heid testified that the primary criterion in designing reservoirs is the total volume, which is affected by the surface area of the reservoir, watershed drainage area and expected rainfall. Mr. Heid asserted that none of these factors is related to the Maximum Day Demands, and the reservoir is capable of meeting maximum day demands only because of its total volume. Mr. Heid clarified, however, that reservoir intake structures are designed to handle maximum day flows and that he classified those in his Study on Maximum Day Extra Capacity costs.

Mr. Heid also disagreed with Mr. Harwig's suggestion that all purchased power costs should be classified as Maximum Day or Maximum Hour Extra Capacity. (*Petitioner's Exhibit KAH-R*, p. 10.) However, Mr. Heid did not reject the idea that it may be appropriate for part of such expenses to be allocated as Maximum Day or Maximum Hour Extra Capacity. Mr. Heid also noted that, in responding to Data Request Question No. 5(a), Mr. Harwig acknowledged that he only reviewed the tariffs of three (3) of the seventeen (17) electric utilities that serve Indiana-American. (*See Petitioner's Exhibit KAH-R2.*) Mr. Heid observed that Mr. Harwig, therefore, did not quantify the amount of Indiana-American's electric power costs that were actually billed pursuant to demand charges.

Commission Discussion and Findings. We have previously authorized Petitioner to move toward STP. While we affirm herein the benefits to be derived from STP, we also note that we examine the Company's approach in each case based on the evidence that supports the proposed move toward common rates. Accordingly, our original STP authorization does not constitute an automatic approval of every proposal to move further toward common rates.

In the current case, Petitioner has proposed further movement toward STP for its existing rate groups and has also initiated the process of aligning the rate structures of the above mentioned operations acquired following the 1999 rate case with the rate structures of the existing groups. Because the Wabash, Northwest, Mooresville, Warsaw, West Lafayette, and Winchester operations had not formerly been included in the derivation of the STP rates, it was necessary to establish several new rate groups. The addition of these new districts into the STP calculation also created some disparate results within some of the existing rate groups, with some groups moving closer toward STP rate levels while other groups moved away from STP rate levels. Such results are not unexpected given the relative significance of the six (6) districts that have been added. In Petitioner's next general rate proceeding we anticipate that all groups will make a consistent move toward STP. No party filed testimony opposing Petitioner's rate design proposals. Therefore, we approve the Petitioner's proposed rate design, subject to our revenue requirement findings.

Except for the Equivalent Hydrant Ratio issue, Mr. Heid accepted all of the Public's recommendations. We accept Mr. Heid's suggestion regarding the Equivalent Hydrant Ratio. As to the concern expressed by Mr. Harwig with respect to the reservoir costs allocation, we find that Mr. Harwig did not demonstrate how a reservoir designed to meet the total volume sales would fail to meet Maximum Day Demand according to the criteria described by Mr. Heid. We agree with Mr. Heid that the reservoir intake structures must be classified as Maximum Day Extra Capacity costs since these structures handle the transmission of the Peak Demand from the reservoir to the customers.

Concerning the purchased power expenses argument, we note that Mr. Heid, at least theoretically, did not reject the possibility that at least part of this expense could be classified as Maximum Day or Maximum Hour Capacity costs. However, no evidence has been provided by Mr. Harwig quantifying what, if any, amount should be allocated to the Maximum Day or Maximum Hour costs. Therefore, we find that Mr. Heid's allocation should be accepted.

Therefore, in this Cause, we find that Petitioner's COSS is sound. Petitioner's use of the Base-Extra Capacity method is consistent with previous Cost of Service Studies conducted by Indiana-American and has been accepted by this Commission in past proceedings. Where appropriate, Petitioner has followed the methodology as found in the AWWA manual.

XV. DEPRECIATION STUDY

OUCC's Position. Harold L. Rees, Principal Utility Analyst for the OUCC, testified that Petitioner:

(1) conducted its last full book depreciation study with data ending December 31, 1995;

(2) has experienced substantial growth in its plant including the purchase of several utility properties resulting in the depreciable plant being tripled since the last study; and
(3) has made many substantial additions of new technology plant, which would increase the remaining lives of certain facilities. (*Public's Exhibit No.* 7, pp. 3-4.)

Mr. Rees recommended that Petitioner:

(1) prepare a new depreciation study to be filed in a separate procedure prior to filing its next rate case;
(2) use the depreciation rates previously authorized if the addition of depreciable plant is no more than $10 million from acquisitions; and
(3) within thirty (30) days of this Order, file with the Commission and the OUCC, a report on whether it is maintaining in its records the type of plant data needed for an equal life group ("ELG") depreciation study. (*Id.* at p. 15.)

Petitioner's Position. James Cutshaw testified that Petitioner is not opposed to preparing a new depreciation study. However, Mr. Cutshaw expressed concern about the time frame suggested by the Public, citing that this would restrain Petitioner's ability to file a new rate case prior to completing the depreciation study. Mr. Cutshaw pointed to the substantial growth in Petitioner's plant due to recent acquisitions which, because of the detailed and costly record keeping needed for ELG studies, would require even more resources and time devoted to classifying and reviewing data in preparing the study.

Mr. Cutshaw also disagreed with the limitations on depreciation rates for plants under $10 million added by future acquisitions. Mr. Cutshaw opined that the Commission should continue to follow its past and current practice of setting depreciation rates based on the outcome of reviewing depreciation studies. Also, Mr. Cutshaw did not accept Mr. Rees' final recommendation that Petitioner file a report within thirty (30) days, detailing its ability to file an ELG study.

Commission Discussion and Findings. Both Petitioner and the Public agree as to the need for a new depreciation rates study. We find it reasonable that Petitioner should file a depreciation case prior to filing its next rate case, and that such depreciation case be filed reasonably far enough in advance of the next rate case to allow updated and approved depreciation rates to be used in the next rate case. In addition, Petitioner should, within thirty (30) days of the date of this Order, file a report stating whether it is maintaining the detail to support the ELG method, but no other demonstration need be made at this time. We also find it is inappropriate to issue a blanket order regarding depreciation rates in future acquisitions and will continue to address this issue as a part of such acquisitions on a case-by-case basis.

XVI. COMMISSION ORDER

IT IS THEREFORE ORDERED BY THE INDIANA UTILITY REGULATORY COMMISSION that:

1. Indiana-American Water Co., Inc. is hereby authorized to adjust and increase its rates and charges for water and sewer utility service by approximately 0.4% in accordance with the Findings herein, which rates and charges shall be designed to produce total annual operating revenues of $139,945,004 which, after annual operating expenses of $104,275,376, are expected to result in annual net operating income of $35,669,628.

2. Petitioner shall file new schedules of rates and charges with the Gas/Water/Sewer Division of the Commission on the basis set forth in Finding No. XIII of this Order. Such new schedules of rates and charges shall be effective upon filing and approval by the Gas/Water/Sewer Division and shall apply to water and sewer usage from and after the date of approval.

3. Petitioner shall file a depreciation case and ELG report in accordance with our determinations in Finding No. XV of this Order.

4. This Order shall be effective on and after the date of its approval.

MCCARTY, LANDIS, RIPLEY, AND ZIEGNER CONCUR; HADLEY ABSENT:
APPROVED: NOV 18 2004

I hereby certify that the above is a true
And correct copy of the Order as approved.

Nancy E. Manley

Nancy E. Manley
Secretary to the Commission

ORIGINAL

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF INDIANA-AMERICAN WATER COMPANY, INC. FOR AUTHORITY TO INCREASE ITS RATES AND CHARGES FOR WATER AND SEWER SERVICE AND FOR APPROVAL OF NEW SCHEDULES OF RATES AND CHARGES APPLICABLE THERETO	)	CAUSE NO. 42029 APPROVED: NOV 0 6 2002

BY THE COMMISSION:
Judith G. Ripley, Commissioner
Thomas Cobb, Administrative Law Judge

On June 29, 2001, Indiana-American Water Company, Inc. ("Petitioner," "Indiana-American" or "Company") filed its petition in this cause for authority to adjust its rates and charges for water and sewer service and for approval of new schedules of rates and charges applicable thereto. In the Petition, Petitioner provided notice of its intent to file in accordance with the Commission's rules on minimum standard filing requirements ("MSFRs"), 170 IAC 1-5-1 et seq., subject to certain modifications hereafter described.

Petitions to intervene were filed by Praxair, Inc., the Town of Schererville, the City of Crown Point and the City of Jeffersonville. These petitions were granted by docket entry, and these entities were made parties to this cause.

Pursuant to the Prehearing Conference on July 24, 2001, the Prehearing Conference Order dated August 1, 2001, and notice of hearing given as provided by law, proof of which was incorporated into the record by reference and placed in the official files of the Commission, public hearings in this cause were held on December 6-7, 2001 and February 19-21, 2002, in Indianapolis, Indiana. At the hearings, evidence offered by Petitioner, the Office of Utility Consumer Counselor (the "OUCC") and the Intervenors was admitted.

On February 11, 2002, the Commission issued a Docket Entry asking Petitioner to respond to a number of questions regarding the classification of certain expenses in Petitioner's miscellaneous expense account and provide additional detail as to certain expense items. At the hearing on February 20, 2002, Petitioner presented written responses to the Docket Entry which were admitted as Petitioner's Exhibit JLC-R7.

At the hearing on February 19, 2002, Petitioner and the OUCC presented to the Commission a proposal regarding the treatment of security costs incurred by Petitioner. At that time very limited

supplemental testimony of Petitioner regarding the security costs was also admitted. On May 3, 2002, Petitioner and the OUCC filed a Stipulation and Settlement Agreement regarding the security costs and information relating thereto. Petitioner also filed a motion for protection from public disclosure of certain limited confidential information regarding its expenditures for security-related operation and maintenance expenses that Petitioner proposed to submit under seal pursuant to the agreement with the OUCC. The motion is granted by the Commission on an interim basis.

Pursuant to Ind. Code § 8-1-2-61(b), a public field hearing was held on January 17, 2002, in the City of Gary, the largest municipality in Petitioner's service area, at which time members of the public were afforded the opportunity to make statements to the Commission. Public field hearings were also held in Indianapolis on January 9, 2002, Somerset on January 14, 2002, and Jeffersonville on January 29, 2002.

Having considered the evidence and being duly advised, the Commission now finds:

1. **Notice and Jurisdiction.** Due, legal and timely notice of the filing of the Petition in this cause was given and published by Petitioner as required by law. Proper and timely notice was given by Petitioner to its customers summarizing the nature and extent of the proposed changes in its rates and charges for water and sewer service. Due, legal and timely notices of the Prehearing Conference and the public hearings in this cause were given and published as required by law. Petitioner is a "public utility" within the meaning of that term in Ind. Code § 8-1-2-1 and is subject to the jurisdiction of the Commission in the manner and to the extent provided by the laws of the State of Indiana. This Commission has jurisdiction over Petitioner and the subject matter of this proceeding.

2. **Petitioner's Characteristics.** Petitioner is an Indiana corporation engaged in the business of rendering water utility service to approximately 264,000 customers in 21 counties in the State of Indiana. Petitioner's corporate office is located in the City of Greenwood. Petitioner provides water service by means of water utility plant, property, equipment and related facilities owned, leased, operated, managed and controlled by it, which are used and useful for the convenience of the public in the production, treatment, transmission, distribution and sale of water for residential, commercial, industrial, sale for resale and public authority purposes. Petitioner also provides public and private fire service. In addition, Petitioner provides sewer utility service in Somerset, Wabash County, Indiana and in Delaware County in or near Muncie, Indiana.

3. **Corporate Acquisition History.** Indiana-American was formed in 1983 from the merger of five Indiana water utility subsidiaries of American Water Works Company, Inc. ("American"). In 1993, Indiana-American acquired the common stock of Indiana Cities Water Corporation ("Indiana Cities"). Indiana Cities subsequently was merged into Indiana-American. The Commission has dealt with the treatment of the purchase price paid by Indiana-American to acquire Indiana Cities in two prior cases. The first order dealing with this issue was the Commission's Order in Cause No. 40103, 169 PUR4th 252, dated May 30, 1996 (the "1996 Rate Order"). The Commission again considered this issue in its Order in Cause No. 40703 dated December 11, 1997

(the "1997 Rate Order"). Indiana-American's most recent rate case was resolved by settlement. Indiana-American Water Company, Inc., Cause No. 41320, July 1, 1999. Since Indiana-American's last rate case, it has made a number of additional acquisitions, including Northwest Indiana Water Company ("Northwest"), United Water West Lafayette Inc. ("UWWL"), United Water Indiana Inc. ("UWIN"), and the Cementville system of Watson Rural Water Company ("Cementville"). The treatment of the purchase prices for these acquisitions is an issue presented for the first time in this cause.

4. **Existing Rates.** Petitioner's existing basic rates and charges for water and sewer service provided in the fifteen counties Indiana-American served at the time of its last rate case were established pursuant to the Commission's Order in Cause No. 41320 dated July 1, 1999. Petitioner's rates for water service in the portion of its service area formerly served by Northwest were approved by the Commission's Order in Cause No. 41033 dated May 27, 1998. Petitioner's rates for water service in the portion of its service area formerly served by UWWL and UWIN (hereinafter sometimes referred to collectively as "United") were approved by the Commission's Orders in Cause No. 41046 dated July 8, 1998 and Cause No. 41047 dated July 8, 1998, respectively. The Commission Orders approving the merger of these companies into Indiana-American authorized Indiana-American to adopt the rates of these predecessor companies for application in the areas formerly served by them. Petitioner's rates for water service applicable to the industrial park within the Seymour Municipal Airport known as Freeman Field were approved by the Commission's Order in Cause No. 41655 dated April 4, 2001, which Order approved a two-stage movement to the Seymour Operation rates for the newly acquired Freeman Field System. Since its last rate order, Indiana-American has also implemented certain public fire protection surcharges pursuant to Ind. Code § 8-1-2-103(d) and the Commission Orders in Cause Nos. 41476, 41536, 41920, 42056 and 42147.

5. **Proposed Three-Step Rate Procedures.** One of the major elements of this proceeding involves Petitioner's construction of a new underground water intake tunnel from offshore Lake Michigan to Petitioner's Borman Park Water Filtration Plant in Gary (the "Tunnel Project"). The Commission's Order in Cause No. 41484 approved the merger of Northwest into Indiana-American. That Order also approved a settlement agreement between Indiana-American, the OUCC and industrial intervenors which provided, among other things, that (a) Indiana-American would file a petition by March 31, 2000 seeking Commission approval of the Tunnel Project and (b) if the Tunnel Project were approved, Indiana-American would be permitted to use a three step ratemaking procedure with regard to Northwest in its next rate case. Indiana-American filed a petition for approval of the Tunnel Project on March 21, 2000, and the Tunnel Project was approved by the Commission's Order in Cause No. 41692 dated November 8, 2000. In its petition in the present cause, Petitioner did elect to use the three-step procedure, but for its entire body of ratepayers.

The Prehearing Conference Order provides that Indiana-American shall submit evidence as to the estimated cost and in-service date for the Tunnel Project and may also include estimated costs and in-service dates for two other projects – a source of supply project in Newburgh (the "Newburgh

Project") and treatment plant improvements in Terre Haute (the "Terre Haute Project" or the "Wabash Valley Project"). The Prehearing Conference Order further provides that the first step of any rate increase granted in this cause shall be effective upon the issuance of a rate order herein and shall not include costs of the Tunnel Project, Newburgh Project or Wabash Valley Project. The second step shall be effective on the first day of the next month following the in-service date of the Tunnel Project and shall include (i) the application of the Commission-determined cost of capital to the estimated Tunnel Project costs (or the actual certified costs if lower), plus related income tax expense; (ii) depreciation expense on the Tunnel Project; and (iii) property taxes and other operating expenses associated with the Tunnel Project. Petitioner was also permitted by the Order to request inclusion in the second step of the same types of costs relating to the Newburgh Project and the Wabash Valley Project, provided they are placed in service on or before the Tunnel Project; they are found reasonably necessary; and the cost estimates for such projects are found reasonable. The third step is proposed to be effective after any retirement of the existing water intake tunnel to reflect the application of the Commission-determined cost of capital to the estimated cost of removal (or the actual certified cost of removal if lower), related income taxes expense and any change in operating expenses, depreciation, property taxes and other items reflected in steps one and two because of the retirement of the existing tunnel.

6. **Petitioner's Request In This Case.** Petitioner originally proposed that its operating revenues, which impact forty or more Indiana communities, be increased by 10.71% in Step One, 8.00% in Step Two and 0.09% in Step Three. Petitioner proposes that the Newburgh Project and the Wabash Valley Project be included in the Step Two increase.. As discussed above, the Step Two and Step Three rates are proposed to be subject to adjustment if the actual costs are less than the estimates. However, Petitioner's original proposal was affected by subsequent developments, including, apparently, the proposed settlement agreement regarding security costs. We have authorized a Two Step process in this Order. The proposed Step Three, involving less than one-tenth of one percent, over the entire rate base is not necessary.

Since the 1996 Rate Order, Petitioner has implemented single tariff pricing on a phased-in basis except in the areas formerly served by Northwest and United and except for the Wabash Operation which remains separate for a specified time due to a settlement agreement approved in the 1997 Rate Order. Petitioner proposes further movement toward common rates in this proceeding.

This Commission approaches single tariff pricing carefully, considering proximity, connectivity, and comparability of costs in each case; and, where appropriate, we will look to a weighted average, and not favor a mere move to the highest rate.

7. **Test Year**. As provided in the Prehearing Conference Order, the test year to be used for determining Petitioner's actual and pro forma operating revenues, expenses and operating income under present and proposed rates is the twelve months ended March 31, 2001. The financial data for this test year, when adjusted for changes as provided in the Prehearing Conference Order, fairly represents the annual operations of Petitioner and is a proper basis for fixing new rates for Petitioner and testing the effect thereof.

8. Acquisition Adjustment Request. Petitioner seeks authority to earn returns on acquisition premiums (an "acquisition adjustment"), related to the purchase of several utilities acquired since its last rate case.

Acquisition Adjustment, as used herein, is summarized as follows:

> The general rule related to the acquisition of utility plant previously used in the utility function is that the rate base component for the plant includes only the original cost of the property to the first owner devoting the property to public service. Therefore, if a utility purchases fixed assets from another utility at a price in excess of the seller's original cost (net of accumulated depreciation), the addition to the purchasing utility's rate base reflecting the acquired assets is limited to the undepreciated original purchase price. The excess amount paid is referred to as an acquisition adjustment and is placed in a separate account to be treated for ratemaking purposes as so authorized by the jurisdictional regulatory commission. Hahne, Aliff, Accounting For Public Utilities, §4.04 [2], 1983.

Indiana-American proposes that the rates authorized in this proceeding provide a return on the fair value of Indiana-American's property which included an opportunity to earn a fair rate of return on the full purchase prices of the Northwest, United and Cementville acquisitions. Indiana-American has sought to justify this treatment by showing (a) the fair value of the acquired assets is no less than the purchase prices; (b) a fair rate of return would be no less than the Company's cost of capital; (c) the purchase prices were the result of arm's length bargaining and were reasonable compared to comparable transactions, other marketplace measures and the value of the underlying assets; and (d) the resulting consolidation has produced cost savings and service enhancements for its customers that exceed the fair value increment Indiana-American is seeking. The Public opposed Petitioners authorized recovery of a return on the acquisition's of Northwest, United and Cementville and asserted that the reasonableness of the purchase prices of those utilities have not been shown and that cost savings and service enhancements occurring as a result of the consolidation have not been shown to exceed the fair value increment Indiana-American is seeking.

It is the established policy of this Commission to allow an acquisition adjustment in rates in only two events, namely:

1. As a result of the acquisition, are there significant and demonstrable benefits flowing to the ratepayers, e.g. better service and/or lower rates?
2. Does the acquisition result in correction or salvage of an entity identified by this Commission as a "troubled" utility?

Further we note that Petitioner in this Cause attempts to aggregate all of its transactions into one analysis. Our policy is to evaluate acquisitions on a case-by-case basis. In the case of merged operational[1] and management services, they will be separated for purposes of rate consideration

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United and Northwest, acquired about the same time and with quite similar operations, will be considered as a unit

insofar as possible. A case-by-case analysis will prevent the benefits, if any, from one transaction being conveyed to another transaction and ensure that each acquisition is measured on its own merits. To allow utilities to aggregate their cost savings to show ratepayer benefits would in essence allow utilities favorable treatment on acquisition adjustments where no ratepayer cost savings exist for that particular acquisition. Such a cost savings credit would erode the ratepayer benefit of those savings by using them to justify ratepayer funded acquisition premiums. We will not endorse the recovery of acquisition adjustments without sufficient proof that a particular acquisition meets one or both of the two standards set out above.

A. **The Northwest Acquisition**. Prior to its merger with Indiana-American, Northwest was a public utility providing water utility service to retail customers located in and adjacent to the communities of Burns Harbor, Chesterton, Gary, Hobart, Merrillville, Portage, Porter, and South Haven in Lake and Porter Counties. Northwest also provided wholesale service to various communities and utilities in those counties as well. Northwest served approximately 65,000 customers and a population of approximately 250,000 people. All of the common stock of Northwest was owned by Continental Water Company ("Continental" or "CWC") which was a wholly owned subsidiary of National Enterprises, Inc. ("NEI").

On June 25, 1999, NEI was acquired by and merged into American Water Works. On January 1, 2000, pursuant to authority granted by the Commission in Cause No. 41484, Northwest was merged into Indiana-American, with Indiana-American being the surviving corporation. After the merger, Indiana-American commenced service in the areas and to the customers previously served by Northwest.

Petitioner has requested authority to earn a return on an imputed acquisition premium of $21,472,000. Petitioner applied its 8.36% weighted cost of capital to this amount to calculate its requested fair value increment of $1,795,059 before tax gross up. The calculation is as follows:

Purchase price	$	48,752,000
Shareholder's equity @ 6/30/99		27,280,000
Acquisition Premium	$	21,472,000

Thus, Petitioner seeks authority to earn a return on an acquisition adjustment representing the difference between what it paid to acquire Northwest and the net book value of the utility's equity at the time it acquired Northwest. We consider this request in the light of our previously stated standards:

1. As a result of the acquisition, are there significant and demonstrable benefits flowing to the ratepayers, e.g. better service and/or lower rates?

2. Does the acquisition effect correction or salvage of an entity identified by this

in view of the quantity of evidence presented in this case. Petitioner is directed to separate entities in future applications.

Commission as a "troubled" utility?

Indiana-American has requested the Commission find that the full amount paid for Northwest, as allocated, is in fact, the "fair" value on which Indiana-American's shareholder (AWWA) should earn a return. In order to justify the amount requested, Petitioner's witness, Christine J. Doron, Indiana-American's vice-president and treasurer, provided evidence on her claim that benefits to the consumers outweigh the additional costs those customers will incur by paying a return on the acquisition premium.

Ms. Doron listed several areas of Operations & Maintenance expense where she believed savings have occurred since the mergers. She also listed areas of capital expenditure where she believes savings have occurred. In addition, Ms. Doron stated the cost of capital for Northwest and the United companies has been reduced due to the mergers thus resulting in savings associated with borrowed funds. Ms. Doron asserted that she only has included savings which were quantifiable. Her original testimony concluded that savings to customers would outweigh the cost customers would pay on the acquisition adjustment by $16 million (Corrected Exhibit CJD-4) if those savings held true and steady for the next 40 years. Ms. Doron claimed savings of $4,039,590 per year for the United and Northwest acquisitions combined. In her rebuttal testimony, she made an alternative calculation which included a year-zero savings at a minimum of $4,487,686 and annual savings of $4,094,210. She asserted these would show savings to customers of almost $20 million. Her calculation included several assumptions which we will detail later in this order.

Ms. Judy Gemmecke, a CPA, and utility analyst for the OUCC, criticized Ms. Doron's calculations and methodologies. Ms. Gemmecke's calculations showed that, if the OUCC's calculated savings were considered along with the rate treatment Petitioner seeks regarding its acquisition adjustment (i.e. acquisition adjustment not amortized at same rate as asset lives), there would be a net cost to consumers over the next 40 years of $8 million dollars (Public's Exhibit 2-D). Ms. Gemmecke commented on Petitioner's request to obtain a return on the amount of the acquisition adjustment, or fair value increment, in perpetuity by not reducing through amortization the acquisition adjustment at a rate consistent with the assets to which they are related.

We also discuss below the annual savings Petitioner asserts derive from the acquisitions of United and Northwest. This analysis is complicated by the fact that Petitioner has merged some services of United and Norethwest, as noted above.

a. **Amount of Savings Related to O & M Expenses.** The Petitioner's witness Ms. Doron and the OUCC's witness, Ms. Gemmecke estimated different total O & M savings related to the acquisitions of United and Northwest. Whereas Ms. Doron estimated total annual savings of $4,094,210 related to the acquisitions of United and Northwest, Ms. Gemmecke calculated savings of only $2,695,868.

i. **Labor and Benefits.** Whereas Ms. Doron estimated total annual savings of $3,054,987 in the category of Labor and Benefits, Ms. Gemmecke calculated savings of only $2,900,956. Ms. Doron calculated labor expense savings for the Northwest operation by

determining the gross labor expense plus overhead for a reduction in labor force, further reduced by the amount of labor and overhead capitalized, then netted against additional personnel hired at the corporate headquarters and customer service center which were necessary to cover the duties of those employees dismissed. However, Ms. Gemmecke noted Ms. Doron's calculation for the United systems did not detail net positions eliminated, but rather took wages plus overhead for calendar year 1999 and compared that with calendar year 2000 for the same systems. Combining the results of these two different methodologies resulted in her conclusion that net savings from labor and benefits were $2,965,942 adjusted to $3,054,987 in her rebuttal testimony. Petitioner's witness, Mr. Cole elaborated on the types of staffing reductions and re-organizations that have taken place. He also stated that he has included staffing reductions associated with the Peoples Water and Shorewood Forest acquisitions in his calculations of Northwest.

First, the OUCC criticized Ms. Doron's analysis by noting that Ms. Doron's calculation of the percent of labor recorded as an O&M expense as opposed to a capitalized expense was based on 1998 percentages. But in calculating the savings, Ms. Doron had used the 1999 wage totals and inflated them to reflect 2001 equivalent amounts when she applied the 1998 percentages. This created a mismatch of inflated 1999 O&M wages with 1998's O&M percentage resulting in an overstatement of labor savings associated with the Northwest acquisition. Also, Ms. Gemmecke noted that Ms. Doron compared United's "pre-merger" amount to a "current" amount, but does not state what periods were used. Ms. Gemmecke further noted that the pre-merger amount did not equal the amount reported on United's 1999 IURC report, nor did the current amount equal the test year of April 1 – March 31, 2001. This would result in an overestimation of savings if the amount used did not reflect a total year's costs.

Ms. Gemmecke compared 1999 totals for the categories with test year totals for the same categories. Thus she obtained the true net savings by comparing costs before any of the mergers with the costs encompassing a full 12 months after the mergers. Ms. Gemmecke stated in her testimony on page 18 "This calculation includes savings due to reductions in force and savings associated with better bargaining." We accept Ms. Gemmecke's analysis of this issue.

ii. <u>Group Insurance</u>. Whereas Ms. Doron estimated total annual savings of $213,563 in the category of Group Insurance, Ms. Gemmecke found no additional Group Insurance savings noting that such savings had already been included in Labor and Benefits savings. Ms. Doron made an additional calculation for group insurance savings based upon the remaining employees and the differences in insurance rates under their former ownership compared to those rates under their current ownership. Ms. Doron purports an additional savings of $239,964. Ms. Gemmecke noted that Ms. Doron had included in "Labor" items known as "Overhead". Ms. Gemmecke stated that items included in "overhead" already included group insurance. Thus, Ms. Doron counted part of the group insurance savings twice.

Ms. Gemmecke made a similar adjustment, but included her calculation under Labor and Benefits savings as we discussed earlier.

Taking the Labor and Benefits, including group insurance savings in total, the two parties are about $368,000 apart in savings (Pet's $3,268,550 – OUCC's $2,900,956). While this may not appear to be substantial, the net present value over 40 years would be $6.6 million ($367,594 inflated at 3% per year for 40 years @ 7.56%); or $5.9 million using Petitioner's requested weighted cost of capital of 8.36%. The difference of $368,000 calculated for a 20-year period, the present value amounts would be $4.7 million using 7.56% or $4.4 million at 8.36% weighted cost of capital.

Again, we believe the OUCC has more precisely determined this item.

iii. Management Fees. Petitioner and the OUCC also calculated the effect of the mergers on management fees. Whereas Ms. Doron estimated total annual savings of $302,224 in the category of Management Fees as a result of the acquisitions, Ms. Gemmecke testified that Petitioner had actually incurred additional costs of $639,256. Before the mergers, both Northwest and United were part of a larger corporate structure and each had management fees allocated to them. Ms. Doron gives no further details at how she arrived at her figure other than stating she compared pre-merger amounts with post-merger amounts on a per customer basis.

In her testimony, Ms. Gemmecke states Ms. Doron had arrived at a management fee per customer of $6.25 that was effective before the mergers. Ms. Gemmecke further states that Ms. Doron used an amount less than the calendar year 2000's management fees to calculate a per customer management fee. Ms. Gemmecke further criticizes Ms. Doron's "post-merger" calculations as being incomplete as certain elements were missing from the "post-merger" management fees. To compensate for these missing elements, Ms. Gemmecke used management fees as expensed in the test year. Her comparison of "pre-merger" to "post-merger" management fees reveal an increase in management fees, thus no savings were realized in this cost area. Ms. Gemmecke explains this result in her testimony:

> In this particular case, methods may have been changed and employees eliminated, however new charges were added via corporate and service company allocations that greatly diminished the savings.

We find no savings have been shown in this area of Petitioner's costs in this case.

iv. Chemical Savings. Petitioner's witnesses Ms. Doron and Mr. Cole both refer to savings in the costs related to chemical purchases. Ms. Doron states these savings amount to $163,017 whereas the OUCC found that these savings were only $81,592. Mr. Cole described the treatment processes that have changed in Northwest since being merged with Indiana-American. Mr. Cole attributed these changes to the superior knowledge of employees of American Water Works Service Co. in the area of water quality. Mr. Cole stated these immediate savings were realized "only because of the affiliation with American." Mr. Cole stops short of saying this was a patented system, or that this specific knowledge has been withheld from the rest of the water service providers.

OUCC's witness, Ms. Gemmecke, criticized Ms. Doron's calculation on the basis that: 1) two different methods of calculation were used for Northwest and United, and 2) one of the savings factors Ms. Doron used for calculating Northwest chemical savings had not yet occurred, even though Mr. Cole stated that these were "immediate savings". Ms. Gemmecke calculated cost savings of $81,592 by using the methodology of comparing 1999 costs with test year costs. We find this methodology to be sound and adopt the Public's calculation of chemical savings.

v. **Rate Case Savings**. Petitioner's witness, Doron, stated the amount of savings she had derived was the result of comparing current levels of rate case costs to the most recent rate cases for Northwest, UWWL and UWIN amortized over the same period as in their respective previous rate case. She stated her estimated savings were conservative because her estimated cost of a current rate case did not include a reproduction cost new less depreciation study, cost of service study, nor depreciation study. She provided no further evidence of her calculation into evidence.

OUCC's witness, Ms. Gemmecke, provided evidence based upon a comparison of rate case expense approved in Northwest's and United's last rate cases with the actual rate case expense being requested in this cause, as allocated to the respective operating systems. Ms. Gemmecke has provided her calculations in her testimony as schedule JIG-11, page 6. We note that Ms. Gemmecke's calculation uses actual historical expense, increased to 2001 level through an inflation adjustment less Petitioner's requested allocated amount of rate case expense in this cause. This calculation reveals a savings of $143,570 compared to Petitioner's savings estimate of $159,417. We find the Public's calculation to more accurately reflect a reasonable estimate of rate case savings.

vi. **Other O&M Savings**. Petitioner has asserted additional O & M savings to be realized as a result of the acquisitions in the categories of computer related costs ($90,495), audit fees ($61,583), general legal fees ($28,370), lab fees ($14,379) and bank fees ($14,179). The OUCC did not provide evidence to dispute these claimed amounts and we find such savings should be attributed to the acquisitions of United and Northwest.

b. **Amount of Savings Related to Rate Base**. This area of savings encompasses depreciable assets, the purchase of which was avoided. The depreciation expense associated with those assets is also avoided. Thus each subject area has two cost savings components: The savings associated with the return on investment, and the savings associated with the elimination of depreciation expense. For the computer upgrades, Petitioner suggests a savings of $323,559 on an investment of $1,147,900 over the next 5 years. The savings on depreciation expense associated with the computer upgrade avoidance was suggested as being $229,580 annually for the next 5 years. OUCC claims the savings would be $37,256 return on an investment of $149,526, plus $29,905 savings related to the depreciation expense over the next 5 years.

i. **Computer Upgrades**. Petitioner stated that Northwest, prior to the merger, had been investigating upgrades or replacements of accounting software. Due to the merger with Indiana-American, the upgrade and replacements were not necessary. Ms. Doron concluded

that consumers will benefit from the avoidance of a $1.148 million investment. Her conclusion was based on information obtained through documents and conversation from prior Northwest management concerning EMA Services. Petitioner did not offer any further evidence to collaborate the assertion regarding the prior owner's intent in this regard.

OUCC's witness, Ms. Gemmecke relied on evidence provided to the Commission in Petitioner's Minimum Standard Filing Requirements (MSFR's). From what Petitioner provided, Ms. Gemmecke came to the conclusion that the recommendation by the vendor (costs be shared with the other CWC utilities) would have been accepted by the management if the purchase had been consummated. Therefore, she concluded the price of the particular system would have been shared by other affiliates of Northwest. She also stated that the evidence was merely a proposal presented by a salesperson. She contended it was unclear whether Northwest could not have come to purchase the software at a lower price. Ms. Gemmecke came to the conclusion that Northwest's share of the avoided investment would have been $149,526. We do not find Petitioner's evidence on this issue to be persuasive and accept the Public's estimate of savings

ii. Vehicles. Ms. Doron testified to savings related to the disposal or re-assignment of 29 vehicles due to a reduction in the number of employees. Ms. Doron explained in her rebuttal testimony that the reduction was the result of a reduction in employees and a review of vehicle policy. Ms. Gemmecke's direct testimony relied on Ms. Doron's direct testimony for the calculations of savings related to a reduced fleet. She stated it didn't make sense to see a reduction of 29 vehicles for every 55 employees. She also criticized Ms. Doron's calculation of the savings based upon the average original cost. Ms. Gemmecke believed some accounting of the depreciation must be included in the calculation. Ms. Gemmecke calculated savings on 11 vehicles, then applied one year of depreciation to that figure.

For the savings associated with vehicles, Petitioner claims savings of $491,084 on an investment of $248,419 over the next 20 years. Further savings relate to depreciation expense of $21,081 annually. OUCC claims the savings would be $186,280 on investment of $164,664 over 20 years plus savings related to depreciation of $7,699 annually. We find the OUCC calculation to be the more reasonable.

c. Cost of Capital Savings. Petitioner purports savings relating to the cost of capital in an amount of $215,791 annually. Ms. Doron stated that financially Indiana-American is a larger and stronger company than either Northwest or United. She further pointed to access to private and public debt markets through American Water Capital Corporation. Mr. Eckart stated the now combined companies of Indiana-American/United/Northwest have a wider dispersion of risk which allows it to demonstrate greater stability of earnings, and thus more attractive to potential investors. He further stated that purchasers should be attracted to larger-sized bond issues, which is what American Water Capital Corporation (Am.Cap.) provides for Indiana-American.

OUCC's witness, Edward Kaufman, disagreed with Ms. Doron's analysis of the reduction in cost of capital. He described Ms. Doron's analysis as including increasing debt by $5 million and

reducing equity by the same amount. Mr. Kaufman stated that when a utility "increases its percentage of debt and reduces its percentage of equity both the cost of debt and the cost of equity increase." This will, therefore, increase the weighted cost of capital. With the small reduction in capital Ms. Doron claimed (4 basis points), only a small change in the cost of debt or cost of equity will reduce the capital savings Ms. Doron claims exist. Mr. Kaufman further pointed to Petitioner's own testimony in this case which shows an equity percentage of 42.87% which is higher than that used to support its savings claims (42.41%). Mr. Kaufman pointed out that Petitioner's capital structure is not guaranteed to remain the same as presented in the analysis of savings attributable to the acquisitions and Petitioner has given no such assurances. As such, we do not find any savings associated with the cost of capital.

d. **Year Zero Savings.** Petitioner has included in their calculation on savings associated with the acquisitions, what is termed Year Zero Savings. This is expected as the savings that have occurred from the time of the merger until this rate case. This, as Ms. Doron explained in her direct testimony, consists of savings achieved as of May, 2002.

OUCC witnesses Gemmecke and Gassert both asserted that any savings prior to this rate case have benefited Indiana-American's shareholder, not the customers. Mr. Gassert goes further, saying, "If you accept Petitioner's claimed savings figures, it has already received a significant amount of compensation." Mr. Gassert's claim that any of Indiana-American's captured savings in Year Zero went to the shareholder is illustrated by the fact that Petitioner did not reduce its rates to consumers since before the mergers in 2000. Therefore, Petitioner has kept its savings for 2.5 years until this order is finalized. Mr. Gassert further stated that Petitioner has made no adjustment to its revenue requirement for past savings it is now saying has benefited consumers, thus Petitioner will benefit twice under their proposal – once through the direct benefit of cost savings it has retained and again in a return on its full acquisition adjustment.

Mr. Gassert testified that Indiana-American did not credit the ratepayers with the compensation it claims it has already received. Indiana-American seeks to earn a return on its unamortized acquisition premiums without reducing the requested revenue requirement by the compensation it has or will receive by the time an order is issued in this Cause. Thus, to the extent the savings were achieved, the utility will be compensated twice under Petitioner's proposal.

On Rebuttal, Ms. Doron adjusted her Year Zero savings from $7.35 million to $4.49 million to reflect a shorter period of time, which the customers would have benefited. Ms. Doron stated consumers have benefited from Year Zero savings from the avoidance of an additional rate case. Ms. Doron stated that in Indiana-American's last rate case, Indiana-American agreed to a rate moratorium. "We knew we were agreeing to skip a rate case which had otherwise been assumed in our forecasts. It was only because we knew we would be able to achieve acquisition related savings that we were able to agree to skip that case." However, upon cross-examination, Ms. Doron stated that, at the time, they were only aware of an estimated level of labor savings. Further evidence indicated that no dollar estimates of any savings related to the merger with Northwest had been calculated as of September, 1999, which we note was after the June 3, 1999 settlement agreement.

(Doron transcript page F-104 – F-105)

We note that when parties reach a settlement agreement both parties have given something in exchange for something else. Ms. Doron claimed that Indiana-American could have recovered more in rates if it had not agreed to the rate moratorium. In exchange for agreeing to a rate moratorium, Indiana-American presumably received a rate it could accept without the uncertainty that comes of a fully litigated rate proceeding. In any event, we find that it would appear to be retroactive ratemaking to allow Petitioner to recover the past "loss" to which it had agreed by imputing savings to ratepayers they have not and will never receive.

e. **Amortization of Acquisition Adjustment/Fair Value Increment.** Petitioner's testimony and supporting schedules indicate their request to earn a return on the acquisition adjustment. Petitioner's Exhibit CJD-4 page 5 of 5, as corrected, reveals a revenue requirement, adjusted for taxes of $4,654,589 per year. Petitioner does not adjust their acquisition adjustment for any amortization.

OUCC's witness, Gassert, noted that Indiana-American has used the unamortized acquisition premium balance to calculate its fair value increments not only for Northwest and United acquisitions, but also for the Indiana Cities acquisition. He also states Petitioner included income taxes associated with the fair value increments as a component of revenue requirements, which Mr. Gassert believes to be inappropriate.

OUCC's witness, Ms. Gemmecke, also makes note of Petitioner's request to earn a return on the acquisition adjustment without any reduction for amortization. Thus, she concludes, Petitioner "...is expecting the proposed fair value of the purchased plant to never decrease – not after 10, 50 or 100 years of wear and tear!"

In rebuttal testimony, Ms. Doron criticized Ms. Gemmecke's schedule JIG-11 as not presenting the OUCC's position on the amortization of the acquisition adjustment.

Ms. Gemmecke explained that the schedule shows the OUCC's calculated savings compared to the cost Petitioner plans to impose on the customers in the form of a return on the acquisition adjustment (or fair value increment). Thus, if Petitioner's proposed treatment of the acquisition adjustment (fair value increment) is adopted (i.e. a return on a never-diminishing acquisition adjustment), the consumers would fund the cost of acquisitions, not reap a savings. We agree with the OUCC analysis of this issue.

f. **O & M Savings Generally.** Mr. Gassert expressed concerns about the O & M savings generated as a result of the Northwest acquisition. Mr. Gassert considered it doubtful that Indiana-American has generated the O&M savings it has claimed in this cause. For example, according to Petitioner's Exhibit CJD-4, page 1 of 5, Petitioner has identified annual projected savings of $4,669,642. Of this amount, $4,325,721 is related to the Northwest merger. Yet O&M costs for Northwest are higher in this case than they were in Northwest's last rate case even though

Petitioner has claimed $4.3 million dollars of O&M savings. Even if the O&M expenses approved in Northwest's last rate case of $14,653,263 are increased by 3% for inflation for the last 3.5 years, Northwest's O&M would have increased to $16,252,196. Yet, Petitioner has proposed that Northwest's O&M expenses in this case are $14,876,434. This would indicate that Petitioner has achieved annual O&M savings of only $1,375,762 ($16,252,196-$14,876,434), well short of the $4,325,721 savings Petitioner claimed in this cause. Mr. Gassert noted our position on cost savings in Cause No. 40703:

> Since the acquisition would produce benefits in cost savings in excess of the purchase price, modern finance theory prescribes that Indiana-American should have bought the Company at the purchase price it paid ($37 million). And in a competitive market the cost savings would enhance the purchaser's operating income and thereby cover the capital costs associated with the purchase price it paid ($37 million). And in a competitive market the cost savings derived by combining the two companies would enhance the purchaser's operating income and thereby cover the capital costs associated with the purchase (interest on debt and earnings for the common shareholder). (p. 30, Final Order)

Mr. Gassert further asserted that, even if Indiana-American did achieve the level of savings it has claimed, the comments about the competitive environment made in the final order of Cause No. 40703 were not intended to apply in the long term. He contended the comments are applicable only in the short term because in a competitive market, the cost savings achieved by combining two companies would only enhance the purchaser's operating income in the short term. Mr. Gassert noted that in the long term, competitors to the combined company would be required to implement similar efficiencies and lower their prices to remain competitive. Therefore, the savings would only be available in the short term to cover the capital costs associated with the purchase. Finally, Mr. Gassert noted that the Missouri Public Service Commission discussed the short-term nature of savings in its order in Case No. WR-2000-844 wherein it made the following statement:

> **1.D. Should the Company be allowed to recover a portion of any "savings" which resulted from the AWK/NEI merger from Company's customers under its proposed "Sharing Savings Plan"?**
>
> Regulation is intended to be a substitute for competition. In a competitive market, a company that achieves gains in efficiencies only gets to keep the benefit of those gains until its competitors implement similar efficiencies, and the company is forced to lower its prices to remain competitive. <u>A regulated company does not get to keep the benefit of its efficiency gains indefinitely either.</u> If the gains are large enough and not offset by increased costs elsewhere in its operations, a utility will get to keep the gains only until a complaint is brought and resolved. If the gains are offset by increased costs, the utility will only get to keep them until a rate increase case is filed and resolved. Gains in efficiency are "captured" in a rate case, and forward-looking rates are set taking the gains into account.
>
> This last situation is the one in which the Company finds itself: it claims it has achieved gains in efficiency from the merger of NEI and AWK, but nonetheless

has found it necessary to request an increase in rates. The Company asks to be allowed to share (i.e., keep 50 percent) of the savings it asserts it has achieved from the AWK/NEI merger. This Commission, in keeping with regulation's role of simulating competition, will not approve the shared savings plan.

Mr. Gassert added that Missouri-American Water Co. had not sought to recover an acquisition premium related to the NEI acquisition as it has in Indiana. Rather, American only requested recovery of the transaction costs related to the merger and to share the claimed savings. Both requests were denied. Finally, Mr. Gassert notes that OUCC witness Judy Gemmecke provides a more in-depth look at Petitioner's unsupported claim of savings.

Mr. Gassert concluded his analysis on the Northwest acquisition request by recommending that no revenues be provided to compensate Indiana-American for its proposal to recover an imputed acquisition premium related to its parent company's purchase of NEI. He further recommended that if the Commission does determine that revenues should be provided, then the ratepayers should be credited with the compensation Indiana-American has already received during the 2½ years it has been able to retain the savings it claims. Mr. Gassert stated that this treatment would be necessary to prevent double compensation of Indiana-American. The compensation was earned in 2 ½ years and should be spread over the 3-year life expectancy of these rates and would calculate to be a $3.92 million ($11.75/3 yrs) annual reduction to annual revenue requirements. Finally, Mr. Gassert recommended that if the Commission does determine that a fair value increment is warranted, the Commission should consider disallowing a portion of the additional $58 million of additional investments. The amount disallowed could be tied to the amount of the acquisition premium allowed. Thus, if the Commission allowed the full $21.472 million Petitioner is seeking, then Petitioner's original cost rate base could be reduced by the same amount.

Mr. Gassert testified that "Based on the Commission's comments, if the cost savings achieved are not in excess of the purchase price, then American paid too much money to acquire the utility..." The Public also noted that the Missouri Commission stated that it is regulation's role to substitute competition and Mr. Gassert noted that in a competitive environment savings would only be available in the short term to cover the capital costs associated with the purchase. Both Mr. Gassert and Ms. Gemmecke are opposed to Petitioner's use of what is termed "year-zero savings".

Finally, Mr. Gassert noted that Petitioner's claimed savings figures would seem to indicate Indiana-American has already received a significant amount of compensation. Petitioner claimed approximately $4.3 million of annual O&M savings resulting from the Northwest and United mergers. The Northwest merger was effective 1/1/00 and the United merger one month later. Any savings achieved would flow to Indiana-American because it did not lower its rates to reflect the O&M savings achieved. In fact, those savings will remain with Indiana-American until an order is issued in this Cause. Therefore, Petitioner will have been able to keep those savings for 2 ½ years. Applying Petitioner's $4.3 million claimed savings to a 2.5 year factor generates $11.75 million of compensation Petitioner has already or will receive by the time an order is issued in this Cause.

On behalf of Intervenor Crown Point, witness Gregory T. Guerrattez, President of Financial Solutions, Inc., also criticized Petitioner's analysis of merger-related savings. Mr. Guerrattez

criticized Ms. Doron's failure to consider the effect of corporate overhead to be allocated to Northwest customers. He states that by not including this amount, the benefit of the merger and acquisition has been overstated. Mr. Guerrattez then criticized Petitioner's use of a 40-year analysis. He suggested a 20 year analysis would be more "real world". Mr. Guerrattez has calculated a cost above (over) alleged savings to be about $93 million to Northwest Indiana Customers over the next 20 years.

Intervenor Schererville's witness Theodore J. Sommer, Partner with London Witte Group LLC also criticized Petitioner's analysis of merger-related savings. While not necessarily opposed to the centralizations and consolidations of functions that will produce cost savings, Mr. Sommer expressed concern about the potential lack of control Petitioner has over costs imposed by its service company and other affiliates. This potential lack of control affects the projection of merger savings that support the return being sought by Petitioner on its acquisition adjustment. Mr. Sommer also commented on the use of inflation rates in the analysis of the alleged savings and provided several schedules using various rates of inflation in ½% increments. Mr. Sommer indicated that assumptions about the inflation rate have a substantial impact on the amount of savings being projected by the Petitioner. He further stated that if Petitioner's calculation of savings is overstated by only 12.67%, this alone would negate all present value savings.

g. **Commission Findings on Ratepayer Benefits.** The OUCC and Intervenors expressed concerns over O&M savings claimed by Petitioner. Mr. Gassert presented an analysis based on actual O&M numbers requested in this case and O&M expenses approved in Northwest's last rate case. This analysis indicated that Petitioner only achieved savings of $1.375 million while it claimed $4.325 million. Ms. Doron did not dispute the accuracy of his calculation but responded by stating that the O&M expense requested in this rate case includes the corporate allocation. Ms. Doron did not believe it was appropriate to include the corporate allocation costs in the savings analysis because it is not an incremental cost. We find that the corporate allocation should be considered in this analysis. In order to determine the ratepayer benefits to Northwest's ratepayers, we must consider all the costs these ratepayers are being asked to recover. We note that the allocated costs are for various services rendered such as accounting and customer service. If these costs were not provided at the corporate level, the services would need to be acquired directly by the Northwest system at some cost. Therefore, if these costs are not included, it would not be a complete or accurate analysis since these services provided by corporate are necessary and come with a cost. Therefore, we believe Mr. Gassert's analysis more accurately depicts the actual savings achieved.

We also note from our order in Cause No. 40103, page 7, the following:

> Additionally, we perceive that some cost savings are the natural result of a sensible consolidation of utility systems, which would appear to undermine Petitioner's claim of its responsibility for the generation of significant savings through management effort. We do not believe such natural synergies are the type of substantial savings and benefits sufficient to invoke an exception from the general propensity of the traditional standard to disallow favorable treatment of an acquisition adjustment.

This statement is applicable in this cause as well.

The parties further disputed Petitioner's claimed savings wherein Mr. Gassert also testified that if Petitioner's claimed savings figures were accepted, Petitioner will have received $11.75 million in compensation by the time an order is issued in this Cause because, in this application, Indiana-American did not credit the ratepayers for savings it already achieved in its fair value increment request. On rebuttal, Ms. Doron argued that Petitioner was able to agree to a rate moratorium in its last rate case and defer a rate case. However, on cross-examination, it was revealed that the stipulation and settlement agreement that included the negotiated rate moratorium was executed on June 3, 1999 (F-107). It was further revealed that in Cause No. 41484, Petitioner's President responded to discovery in September, 1999 indicating that "the savings have not been quantified" (F-105). Ms. Doron suggests that a preliminary estimate of labor savings was available in a separate document. However, it was further revealed on cross-examination that the document in question was dated only by a fax machine which date was February 14, 2002 (F-108). It was also shown that, when that document was provided in discovery it was provided with the qualification that it may very well have been prepared as of the time the Stipulation and Settlement Agreement was executed. When Ms. Doron was questioned if the document was prepared at the time the agreement was negotiated, she responded, "We don't have dates." (F-109). Based on this discussion, we find that, if Petitioner did achieve the level of savings it claimed, then Petitioner did receive compensation for its acquisition of Northwest notwithstanding our findings.

Our task is to determine if the cost savings, which may or may not have occurred warrant some rate-relief treatment. Petitioner claims savings of $52.5 million over the next 20 years (net present value Exhibit CJD-R-4 page 1 of 5) outweigh the costs to consumers of $41 million (net present value). The OUCC calculates that costs to consumers of $42 million would outweigh the benefits of $34.6 million, in which case consumers would be paying more for their water service merely because the water companies in question were acquired.

There is no claim or argument that the Northwest acquisition meets our "troubled utility" test, therefore, we are left only to determine whether this purchase results in significant and demonstrable benefits to ratepayers.

Viewing the evidence as a whole, we find that ratepayer benefits do not exceed the costs of the acquisition premium requested. Accordingly, we deny Petitioner's request on Northwest.

B. <u>The United Acquisition.</u>

a. <u>Background and Position of the Parties.</u> Prior to their merger with Indiana-American, UWWL served approximately 7,500 customers in Tippecanoe County in and adjacent to the City of West Lafayette and UWIN served approximately 9,200 customers in and adjacent to Mooresville in Morgan County, Warsaw (including Winona Lake) in Kosciusko County, and

Winchester in Randolph County. UWWL and UWIN were subsidiaries of United Water Idaho, Inc., which was a subsidiary of United Waterworks, Inc., which in turn was a subsidiary of United Water Resources, Inc.

On February 1, 2000, Indiana-American acquired all of the outstanding common stock of UWWL and UWIN and on the same date UWWL and UWIN were merged into Indiana-American. This transaction was approved by the Commission in its Order in Cause No. 41516 issued on December 15, 1999.

The stock purchase agreement provided a purchase price of $11,250,000 for the common stock of UWWL and $16,000,000 for the common stock of UWIN, both subject to adjustment for certain changes in the common equity balance of the two United companies occurring before the closing date. After these adjustments were made, the actual purchase prices paid by Indiana-American were $11,209,039 for UWWL and $16,653,615 for UWIN. These purchase prices exceeded the book value of the common equity of UWWL and UWIN by 1.69 times and 1.71 times, respectively. (Id., p. 31.) This resulted in a total acquisition adjustment of $12,405,032, of which $5,080,417 relates to the UWWL transaction and $7,324,615 relates to the UWIN transaction.

Petitioner seeks authority to earn a return on an acquisition adjustment representing the difference between what it paid to acquire United and the net book value of the utility's equity at the time it was acquired. Again, the combining of the United and Northwest evidence is a complicating factor.

Here, again, there is no assertion that Petitioner acquired a "troubled utility", and, so, our review will consider the possible benefits to ratepayers only.

Petitioner's witness, Mr. Eckart, testified that he believed the purchase prices for the United properties were fair and reasonable, and that he personally made the decision on what Indiana-American was willing to pay to acquire UWWL and UWIN. He asserted his decision was based on what he thought was in the best interests of Indiana-American and the Indiana consumers. Mr. Eckart also said he assumed fair ratemaking treatment consistent with policies previously expressed by this Commission. He stated he understood the burden would be on Indiana-American to demonstrate the benefits of the acquisition and stated his decision was not influenced by the regulatory treatments of other states.

Petitioner's witness Duane D. Cole, Petitioner's Vice President of Operations, claimed that customers in the areas formerly served by United (the "United Operations") have seen a substantial benefit in the area of support services. United had maintained a minimal support staff. Now those operations have the same level of support as all Indiana-American operations. Mr. Cole also identified a number of benefits related to day-to-day operations, predominantly also in the United Operations. He identified benefits that had been achieved in the United Operations related to the use of chlorine.

Mr. Cole also stated Indiana-American has filters in the Winchester Operation and claims it now has a better configuration resulting in more efficient use of the source of supply there. He adds that System Control and Data Acquisition ("SCADA") equipment has been installed in Winchester, which is monitored now seven days a week. This greatly enhances the ability to respond to emergency situations. Further, Petitioner changed the United policy of not maintaining or flushing hydrants that were located in apartment complexes, taking the position that this was the responsibility of the apartment owner. Indiana-American has also initiated a storage tank inspection program in the acquired operations and has already identified and corrected some problems in the Winchester Operation in connection with the electric heater.

According to Mr. Cole, the most dramatic improvement has been seen in the Warsaw Operation. IDEM had issued to United a public notification within the twelve months prior to the merger for exceeding the maximum contaminant level for vinyl chloride in Warsaw. Mr. Cole said that after the acquisition, Indiana-American immediately pursued an answer to this quality issue and has installed a larger, more efficient aerator which has reduced the vinyl chloride to a non-detectable level

Mr. Cole also stated the United Operations have benefited from Petitioner's deferred main extension monthly payment program. This is a provision of Petitioner's rules and regulations of service which establishes terms for the extension of mains and provision of service to already developed areas where it otherwise would not be affordable. Petitioner has developed a program which allows a main extension deposit essentially to be deferred and recovered without interest over a ten-year period. The first place where Petitioner has had the opportunity to use this program was within the Mooresville Operation for two main extensions to serve 88 customers.

Public's witness testified that Petitioner's asserted savings do not offset the fair value increment requested. Mr. Gassert testified that only $343,921 of the asserted savings are derived from the United transaction while the cost of United's fair value increment is $1,704,409. Public's witness further noted that this deficit would cost the ratepayers $42 million over the next forty years while receiving essentially the same service. Petitioner acknowledged this fact but noted that the customers have seen a benefit in the area of support services and day-to-day operations and provided examples of these service enhancements. Given that there appears to be no dispute that the savings do not offset the fair value increment, we need to measure as best as possible the benefits derived from the service enhancements asserted. We are aware that United Water Co. is a large national water company owned by an even larger French utility company. We are also aware of the resources available to large companies such as Indiana-American. Therefore, we are not as inclined to accept that the utility service provided by that national water company (United) was significantly deficient from what Indiana-American provides and we are reluctant to give significant weight to such claimed service enhancements. Further, we are aware that United's Indiana properties were not in the troubled utility category where we typically see customer service deficiencies, and in such an extreme case, customer service enhancements alone may provide the ratepayer benefits necessary to receive favorable ratemaking treatment. In this case, we do not accept that the customer service enhancements Petitioner claims warrants recovery of an acquisition premium in rates. Further, we

note that the claimed O&M savings fall significantly short of the requested fair value increment requested.

Mr. Gassert testified that in Cause No. 40703, we stated the following about cost savings:

> In that case, Indiana-American submitted extensive evidence regarding the cost savings from the combination of Indiana-American and Indiana Cities, showing that the savings were greatly in excess of the cost of the capital invested in order to make those savings possible. Under informed fair value ratemaking, Indiana-American will be compensated for that investment by recognition of the full amount of the purchase price in the fair value rate base. Indiana-American continues to incur the capital costs associated with the debt and equity funds used to acquire Indiana Cities. We must also continue to grant a fair value return increment which provides that compensation, an issue we shall discuss in more detail later. p. 30.

In granting the fair value increment in that Cause, Mr. Gassert noted, we relied on Indiana-American's showing that savings substantially exceeded the cost of capital to make the savings possible. Since, in this Cause, the capital invested by Indiana-American to acquire the United properties does not generate net savings, and in fact, the costs are in excess of the savings, no fair value return increment should be granted.

b. **Commission Discussion and Findings on United Acquisitions.** Again, there appears to be no dispute that none of these utilities were troubled. Therefore, our discussion and evaluation of each transaction will focus on ratepayer benefits. Indiana-American has sought to justify the ratemaking treatment it seeks on its recent acquisitions of Northwest, United, and Cementville by asserting "the resulting consolidation has produced cost savings and service enhancements for its customers that exceed the fair value increment Indiana-American is seeking." (Petitioner's proposed order, p. 17) Again, it appears that, in order to prove cost savings, Petitioner aggregates these transactions into one analysis so as to justify an acquisition adjustment for ratemaking purposes. And, again, we prefer to consider the transaction standing alone for the reasons previously stated.

Having determined that ratepayer benefits fall significantly short of the cost of the acquisition premium and being mindful of our observation that ". . . .regulators have long been cautious about increasing a utility's valuation based solely on an acquisition price." Harbour Water Corp., Cause No. 41661, we find that Petitioner's request to recover a fair value increment related to its United acquisition should be denied.

C. **The Cementville Acquisition.** As in Northwest and United there is no allegation that the acquired entity ought be considered "troubled", for purposes of an acquisition adjustment. Therefore, our discussion and evaluation of this transaction will focus on resulting ratepayer benefits. Petitioner is requesting to earn a return on an acquisition premium of $335,992 related to its purchase of Cementville's assets from Watson Rural Water.

Petitioner asserts there were unique benefits from this acquisition, including benefits to the remainder of Watson's customers. Petitioner noted that Watson had substantial investments to make in other parts of its system and used the proceeds from the Cementville sale to help defray the costs. However at the same time, Watson could not afford the improvements that were necessary to improve pressure and flow for the Cementville customers. The Public's witness, Mr. Gassert noted that while Petitioner treated this acquisition the same as its Northwest and United mergers, by including it in the rate case as a fair value increment, the Cementville acquisition was not included in Petitioner's Corrected Exhibit CJD-4 that asserts claimed savings exceed fair value revenue requirements. Thus, of the annual $4,039,590 claimed savings in that exhibit, none are attributed to the Cementville acquisition. Therefore, no savings were presented to offset the rate impact of Petitioner's request.

Mr. Gassert also noted that Indiana-American provided very little evidence to justify the inclusion of the Cementville acquisition premium in rates. The most notable benefit he could find is on pages 36 and 37 of Mr. Cole's testimony where Mr. Cole notes that these customers now have iron and manganese filtration and an increase in water pressure. Mr. Gassert testified that it appears that most of the benefits from the transaction flowed to the seller Watson Rural Water. Mr. Cole indicated that Watson avoided a $600,000 investment and the receipt of the $500,000 purchase price allowed Watson to reduce its borrowings for improvements to the remainder of the system. We consider this to be a benefit to another utility's customers the cost of which obviously should not be borne by Indiana-American ratepayers.

Indiana-American has sought to justify the ratemaking treatment it seeks on its recent acquisitions of Northwest, United, and Cementville by asserting "the resulting consolidation has produced cost savings and service enhancements for its customers that exceed the fair value increment Indiana-American is seeking." (Petitioner's proposed order, p. 17) Indiana-American has not shown or quantified any savings that will inure specifically to the Cementville customers.

As we have previously stated, to allow utilities to aggregate their cost savings to show ratepayer benefit would in essence allow utilities favorable treatment on acquisition adjustments where no cost savings exist for that particular acquisition. We do not endorse the recovery of acquisition adjustments without sufficient proof that relates to that particular acquisition.

Based on the evidence, we find that cost savings that relate to Cementville have not been shown.

D. <u>The Peoples Water Company And Shorewood Forest Utilities Acquisition</u>. Prior to its merger into Indiana-American, Northwest acquired the water utility systems of two small water utilities – Peoples Water Company, Inc. ("Peoples") in 1999 and Shorewood Forest Utilities, Inc. ("Shorewood") in 1998. Mr. Cole explained that Peoples was a utility in Gary serving a low-income area whose shareholders were no longer interested in owning the utility. (Petitioner's Ex. DDC, p. 8.) Shorewood was a not-for-profit utility in Porter County seeking improved water quality for its members. (<u>Id</u>.) There were small acquisition premiums associated with these acquisitions that Petitioner originally proposed to include in its original cost rate base. (Petitioner's Ex. JLC-2, Sch. 3.) OUCC witness Gassert argued that allowing a return on the Peoples acquisition adjustment was

inconsistent with the Commission Order approving that transaction and in neither case did Indiana-American submit evidence as to ratepayer cost savings attributable to the acquisition. In its rebuttal testimony, Indiana-American did not respond to Mr. Gassert's testimony regarding Peoples and Shorewood. We find that the Peoples and Shorewood acquisition adjustments should not be included in Petitioner's original cost rate base.

9. **Rate Base Issues (Step One) - Petitioner's Original Cost Rate Base**. Petitioner presented evidence for the first phase of its rate increase that estimated its net original cost of plant as of July 31, 2001. The OUCC used the same general rate base valuation date. A general rate base update after the end of the test year is permitted by the Minimum Standard Filing Requirements provided it is made as of a date prior to the hearing on Petitioner's case-in-chief.

Petitioner's prefiled case-in-chief, contained actual plant balances as of June 30, 2001 and estimated the amount of the construction projects expected to be closed as of July 31, 2001. Mr. Cutshaw commented at the hearing on its case-in-chief that the actual balance closed to utility plant in service as of July 31, 2001 was $2,900,725 higher than his estimate in his prefiled testimony. (Tr., 12/7/01 hearing, p. 79) No workpapers or revised schedules were provided until Petitioner filed its rebuttal testimony.

Mr. Cutshaw criticized Ms. Lynn for not updating Petitioner's rate base when she filed her testimony. However, Ms. Lynn amended her testimony and exhibits on February 15, 2002. As noted in Ms. Lynn's revised testimony, she did not receive updated rate case summary schedules from Petitioner until February 12th. Although these updates were received well after Petitioner's hearing on its case-in-chief, we will include the actual July amounts in our determination of Petitioner's original cost rate base.

Based on the evidence provided, there were four differences between Petitioner's rebuttal schedules and the OUCC's February 15th revision. First, the actual plant balance for Petitioner's Wabash district was inadvertently not updated by Ms. Lynn (Tr., pp. 27-29). We shall use the actual amount for the Wabash district which is approximately $30,000 higher than the estimated amount on Ms. Lynn's schedules.

The second difference is due to an adjustment made by the OUCC for artwork and unused furniture. The OUCC explained that it eliminated $96,559 for assets that were not reasonably necessary for the provision of water utility services. Such assets included; $37,375 for artwork at the Greenwood office; $28,495 for artwork located in the Southern Indiana District; $19,253 for bookcases bought for the president's office; and $11,077 of furniture for the accounting and finance staff that were eliminated as a result of the Shared Service Initiative. We are troubled by the uncontroverted revelations of Ms. Lynn, wherein she noted the difficulties the Public encountered in attempting to confirm the accuracy of fixed asset additions due to the conversion of data in October 1998 to a new J.D. Edwards accounting system and supporting detail not being easily accessible. When Petitioner made this conversion, it combined each fixed asset account into one amount. Petitioner's staff stated that detail existed at a location off-site in the form of ledger books and

detailed report binders and that the hiring of additional personnel would be necessary to retrieve the information requested for review. As a result, all supporting detail could not be produced without an exhaustive effort by Petitioner's staff as well as OUCC audit staff. Ms. Lynn did not adjust rate base for $51,588 in interior design fees, $194,477 in cubicles, countertops, overhead cabinets, filing cabinets and electrical services, associated with the displaced employees from the shared service initiative and $421,362 for office remodeling for the Gary location that she could not reconcile due to inadequate documentation.

Mr. Cutshaw testified that most of Ms. Lynn's adjustments were immaterial. Thus, the amount is not unreasonable and should remain in utility plant. He also noted that the unused space Ms. Lynn mentioned would be used in the near future. Petitioner argues that the items involved represent a small dollar amount when compared to Petitioner's total rate base, however, all components of that base are subject to review by the Public and this Commission, and it is incumbent upon the Petitioner to provide all records. Nevertheless, based on the evidence before us, we accept the Petitioner's adjustments on this issue.

The third difference proposed by the OUCC was an adjustment for invoices Ms. Gemmecke testified should be capitalized rather than expensed. Ms. Gemmecke pointed out that about half of those invoices related to the lining of two wells and the remainder consist of instruments and construction materials of a financial magnitude that warrant capitalization. Indiana-American accepted some of these adjustments. Indiana-American acknowledged that two of the items ($4,203 and $3,395 for work on well 3a in Warsaw) were improperly expensed in the test year but were reclassified to utility plant after the test year but before the rate base cutoff. Accordingly, these items have already been included in the Company's presentation of original cost rate base. Petitioner also acknowledged that $5,048 for pipe installed in well 2a in Warsaw during cleaning, $3,250 for installation of an 8" tie-in in Southern Indiana, and $2,029 for three hydrant meters in Northwest should have been capitalized. Mr. Cutshaw testified, and we find, that these items, totaling $10,327 should be removed from expense and should be reclassified as an increase to rate base. We have included this amount in our finding on original cost rate base.

The final difference pertains to the inclusion of the acquisition adjustments for Peoples and Shorewood which we have previously discussed.

Based on the evidence and our previous findings, we find that Petitioner's original cost for water and sewer property used and useful is as follows:

ORIGINAL COST RATE BASE - STEP 1

	Water Groups 1,2,3	Wabash	Total Sewer	Northwest	Mooresville
Utility plant in service	$436,577,169	$ 7,871,016	$ 700,375	$141,898,412	$ 7,056,471
Capitalized tank painting	286,949	-	-	-	90,123
Deferred depreciation	2,315,273		3,813	62,507	
Post-in-Service AFUDC	4,040,445		5,331	209,573	
Accumulated depreciation & amortization					
- utility plant	(87,756,984)	(1,751,472)	(95,403)	(38,140,524)	(1,053,867)
- tank painting	(249,390)	-	-	-	(41,526)
- deferred depreciation	(408,011)	-	(301)	(4,672)	-
- post-in-service AFUDC	(663,169)	-	(430)	(13,777)	-
Net utility plant	$354,142,282	$ 6,119,544	$ 613,385	$ 104,011,519	$ 6,051,201
Contributions in aid of construction	(35,940,103)	(700,680)	(105,857)	(17,386,477)	(1,445,123)
Customer advances for construction	(17,004,126)	(105,979)	(48,821)	(12,669,762)	(401,801)
Somerset capacity adjustment	(27,621)	-	(64,896)	-	-
Acquisition adjustment	1,106,855	-	30,855	(63,756)	-
Materials and supplies	1,057,107	37,707	1,289	551,210	25,121
Total Original Cost Rate Base	$303,334,394	$ 5,350,592	$ 425,955	$ 74,442,734	$ 4,229,398

	Warsaw	West Lafayette	Winchester	Total Company
Utility plant in service	$ 9,843,127	$14,878,197	$3,536,317	$622,361,084
Capitalized tank painting	154,369	161,249	47,784	740,474
Deferred depreciation	-	-	-	2,381,593
Post-in-Service AFUDC				4,255,349
Accumulated depreciation & amortization				
- utility plant	(2,933,456)	(2,911,210)	(828,957)	(135,471,873)
- tank painting	(56,474)	(58,976)	(26,789)	(433,155)
- deferred depreciation	-	-	-	(412,984)
- post-in-service AFUDC				(677,376)
Net utility plant	$ 7,007,566	$ 12,069,260	$ 2,728,355	$492,743,112
Contributions in aid of construction	(1,022,162)	(3,391,987)	(479,653)	(60,472,042)
Customer advances for construction	(371,515)	(1,119,387)	(251,437)	(31,972,828)
Somerset capacity adjustment	-	-		(92,517)
Acquisition adjustment	-	-	-	1,073,954
Materials and supplies	45,183	69,018	19,486	1,806,121
Total Original Cost Rate Base	$ 5,659,072	$ 7,626,904	$2,016,751	$403,085,800

A. **Rate Base Issues (Step One) - Petitioner's Fair Value Rate Base.** A fair value rate base is not necessarily synonymous with a utility's original cost rate base. Indiana Code 8-1-2-6 established that this Commission values a public utility's property at its "fair value." I.C. 8-1-2-6, as amended, has been interpreted in various fashions since its inception in 1913. In Indianapolis Water Co. v. Public Serv. Comm'n., 484 N.E. 2d 635 (Ind.App.1985), the court addressed what factors could be considered in determining fair value. The court stated that "fair value" is a final conclusion drawn by this Commission from various values and factors, including original cost and reproduction cost. Certainly the fair value of a utility can equal its original cost. See Office of Utility Consumer Counselor v. Gary Hobart Water Corporation, 650 N.E. 2d 1201 (Ind. App. 1995). The Indiana Court of Appeals, in Indianapolis Water Company v. Public Service Commission, 484 N.E. 2d 635 (1985), indicated the following:

> In our determination of fair value, this is not an either/or situation regarding the use of original costs or reproduction costs new less depreciation. But rather fair value is the conclusion or final figure drawn from all the various factors offered in evidence. While original cost is one of the factors the Commission may consider while arriving at fair value is not in of itself an accurate reflection of the fair value of the utility's property.

I.C. 8-1-2-6 also states "[a]s an element in determining value the commission may also take into account reproduction costs at current prices, less depreciation, ..." This Commission has routinely accepted RCNLD studies into the record and considered it as evidence in support of Petitioners' fair value. While this Commission has routinely considered RCNLD studies, reproduction cost is just one factor amongst many that this Commission typically considers in its determination of fair value.

B. **Petitioner's Position.** Petitioner presents a reproduction cost new less depreciation (RCNLD) study by Mr. DeBoy which estimates a replacement cost new less depreciation of $1,099,428,470. This figure is then converted into a trended cost adjusted for technological change figure to estimate a replacement cost of $756,281,105. However, Petitioner does not use the results of either study to estimate the fair value of its used and useful plant. In fact, based on its direct and rebuttal testimony, Petitioner proposes to earn its cost of capital multiplied by its original cost rate base plus its cost of capital multiplied by its unamortized proposed acquisition adjustments to estimate its proposed net operating income.

C. **Public's Position.** The OUCC determined Petitioner's NOI by multiplying its cost of capital by its original cost rate base plus its cost of capital multiplied by certain acquisition adjustments. The key difference is that the OUCC does not believe that Petitioner should be entitled to earn a return on the acquisition adjustments from the merger with Northwest Indiana Water or the acquisition of the United Water properties.

D. **Replacement Cost New Less Depreciation.** As discussed above Petitioner's Witness, Alan J. DeBoy, Vice-President Engineering, provided testimony and sponsored the study to determine the Replacement Cost New Less Depreciation ("RCNLD") value of Petitioner's utility

plant in service ("UPIS"). Mr. DeBoy states that the purpose of the RCNLD study is "to assess the cost to reproduce the existing utility plant in service based on current material and equipment prices and current construction and wage levels." *Exhibit-AJD*, p. 24, lines 1-3. He utilized the Trended Original Cost Method to determine the Replacement Cost New ("RCN") value of the property. He explained that "the Trended Original Cost Method is based on the actual historical cost of construction of the property as reflected on the Company's books and records." *Exhibit-AJD*, p. 24, lines 14-15. The primary source of the trend factors used in Mr. DeBoy's study was the Handy-Whitman Index of Public Utility Construction Costs for Water Utilities. He also used the U.S Bureau of Labor Statistics to trend some accounts. Mr. DeBoy explained that the Utility has "calculated the RCN of its utility property by using the Trended Original Cost Method by means of the Handy Whitman indexes" Exhibit-AJD, p. 27, lines 17-18. Mr. DeBoy's study, which trended the original cost of the Utility Plant In Service (UPIS), resulted in a RCN value of $1,408,981,763. *Exhibit-AJD-1*, Schedule 1.

To determine the RCNLD value, Mr. DeBoy had to estimate the amount of depreciation associated with the RCN value. Therefore, Mr. DeBoy calculated the depreciation or percent condition to be equal to the complement of the depreciation reserve divided by the plant investment as of July 31, 2001. *Exhibit AJD*, p. 33, lines 4-5. He then applied the resulting percent condition of 78.03 to the RCN to determine the RCNLD value. Mr. DeBoy's study resulted in a RCNLD value for Petitioner's UPIS of $1,099,428,470.

Petitioner's Witness, Dr. John A. Boquist, requested that Mr. DeBoy reduce the RCNLD value by 1.34% per year to make sure the impact of technological change was not understated. Dr. Boquist explained that 1.34% figure "is the measure of the average annual rates of change in multifactor productivity in the U.S. manufacturing sector during the period 1950 through 2000 as measured by the U.S. Bureau of Labor Statistics." *Exhibit-JAB*, p. 49, lines 8-11. The resulting RCNLD value after adjusting for the 1.34% technological factor was $756,281,105. Dr. Boquist then added materials and supplies of $1,846,388 and other rate base items to arrive at what he calls a "total replacement cost rate base of $763,952,972." *Exhibit-JAB*, p. 59, line 5. Dr. Boquist stated that "the fair value of property is the amount that a willing buyer would pay a willing seller in an arm's length transaction when both parties have complete information." *Exhibit-JAB*, p. 36, lines 21-22. He also added "In theory fair value should represent depreciated replacement cost of the property." *Exhibit JAB*, p. 37, lines 1-2. He concludes that "[a]sset replacement cost valuations can be used to estimate the fair value of property of a utility such as Indiana-American." *Exhibit-JAB*, p. 37, lines 16-18.

In OUCC Witness Scott A. Bell's testimony, he pointed out that Petitioner has presented a RCNLD study to support a fair value rate base figure in each of its last seven rate cases. The Commission has accepted each of these studies into the record as evidence the respective cases. He added that in Indiana-American's last three rate cases (Cause Nos. 41320, 40703 and 40103), Dr. Boquist provided testimony on fair value rate base and replacement cost valuations. However, Mr. Bell points out that "the Commission has consistently determined that the fair value rate base is not equal to Indiana-American's proposed RCNLD value or its Replacement Cost value." *OUCC*

Exhibit-No. 6, p. 4, line 16-18. He created the following table of the past seven rate cases to illustrate his point. *OUCC Exhibit No. 6*, p. 5, lines 1-3.

Cause No.	Order Date	Commission's Determination of Original Cost Rate Base	Petitioner's Proposed RCNLD Value	Commission's Fair Value Rate Base Determination
41320	07/01/99	293,003,938	* 492,108,096	No Determination
40703	12/11/97	221,628,031	* 398,701,046	318,331,583
40103	05/30/96	186,279,406	* 303,571,716	261,571,000
39595	02/02/94	114,762,256	299,336,080	166,500,000
39215	05/27/92	107,435,891	289,367,162	155,800,000
38880	09/26/90	90,964,050	273,239,652	127,000,000
38347	07/06/88	80,721,738	209,196,578	107,415,200

* Adjusted downward for technological change by Dr. Boquist to determine Replacement Cost.

The Commission notes that the OUCC (in Table 2) used the fair value rate base in Cause No. 40703 that includes Construction in Aid of Construction (CIAC). The Commission's finding excluded CIAC thus finding a fair value rate base of $311,804,823.

Mr. Bell explained that during the first four rate cases (Cause No. 38347, 38880, 39215 and 39595), Petitioner did not make any adjustments to the RCNLD value for technological change, as proposed in this case. *OUCC Exhibit No. 6*, p. 5, lines 7-8. He pointed out that the Commission, in each of those four cases, determined that the fair value rate base was significantly less than Petitioner's proposed fair value determined by the RCNLD studies. He also stated that in Petitioner's next four rate cases (Cause No.'s 40103, 40703, 41320 and again in this cause), that Dr. Boquist requested the RCNLD value be downwardly adjusted by a technological change factor to determine a "Replacement Cost" value. *OUCC Exhibit-No. 6*, p. 6, lines 3-5. Mr. Bell propounds that, even with the downward adjustment for the technology factor, the Commission found that Petitioner's adjusted RCNLD in Cause No. 40103 and 40703 did not represent the fair value rate base. *OUCC Exhibit No. 6*, p. 6, lines 13-15. Mr. Bell stated that a review of the Commission's decisions in two Northwest Indiana Water rate cases (Cause No. 40467 and 39585), and Indianapolis Water (Cause No. 39713/39843) were consistent in that the valuation studies in those cases were found not to be representative of fair value.

Mr. DeBoy used a generally accepted method of performing the RCNLD study. However, Mr. Bell pointed out that the methodology employed by Mr. DeBoy assumes that the Utility's plant would be reproduced exactly today if it were to be rebuilt. Mr. Bell contends that the current water and sewer facilities have been constructed over a period in excess of 100 years in some areas. He also stated that the plant was constructed under different customer demands, financial conditions and

management practices that influenced the original construction of the plant that exists today. He concluded that the plant would not be rebuilt as it exists today. *OUCC Exhibit No. 6*, p. 8, lines 1-5. Mr. Bell also pointed out that the Commission had the same concerns in prior cases. Mr. Bell provided a quote from the Commission's Final Order in Cause Nos. 39871 and 40078, as well as, from the Commission's Final Order in Cause Nos. 39713 and 39843 to illustrate his concerns.

Finally, Mr. Bell states that the RCNLD valuations have not been useful indicators of fair value in past cases and that the Commission has not relied upon these valuations to determine fair value. *OUCC Exhibit No. 6, p. 10, lines 16-20.* He states that the Commission seems to have determined the fair value rate base figure based on a percentage of the original cost rate base. *OUCC Exhibit No. 6, page 10, lines 25-28.* He provided Table 2 in his testimony to illustrate his point. Table No. 2 illustrates the fact that, based on past rate cases, the fair value rate base on average was approximately 42% higher than the original cost rate base. Therefore, Mr. Bell recommends that the Commission give the RCNLD and Replacement Cost valuations no more consideration or weight than the Commission has given them in past determinations of fair value rate base. *OUCC Exhibit No. 6, p. 11, lines 5-8.*

E. **Commission Findings.** The evidence presented regarding the fair value Petitioner's plant covers a wide range. Petitioner's evidence indicates an RCNLD valuation of $1,099,428,470, which, after adjustments for technological change was reduced to $765,281,105. The OUCC appears to suggest that the fair value of Petitioner's plant should be identical to the original cost of that plant, i.e., $403,085,800.

In rare circumstances, this Commission has accepted the OUCC's proposal that fair value can be equated to original cost. This is not one of those rare circumstances, and the OUCC has not presented sufficient evidence to persuade the Commission otherwise. The Commission is equally dubious of the Petitioner's proposed valuation. In reviewing past Commission determinations of fair value for this utility, the Petitioner's proposed valuation represents a considerable leap in value, with no compelling justification given to support such an increase.

In the past, the Commission has used prior fair value determinations of a utility as a starting point for determining a new fair value rate base. In the case at hand, the Commission finds an appropriate methodology for determining fair value would be to take the fair value determination from the last rate proceeding for Indiana-American and each of the acquired utilities, adjust those fair value determinations to reflect inflation from the date of the respective Commission Orders (using the inflation factors found in E. Kaufman's Attachment 1), and then add net plant additions (at cost) of $112,422,000. On the basis of the foregoing evidentiary findings and determinations, we find that the fair value of Petitioner's properties in service and used and useful for the convenience of the public at July 31, 2001 is $562,680,669, as shown in the table below:

Order Date	Petitioner's Cutshaw Exhibit JLC-1, Schedule 4	FVRB IURC Findings	Adjusted for Inflation
12/11/1997	IN-AM, Cause No. 40703:	$311,805,000	$337,507,760
3/26/1997	Northwest, Cause No. 40467	85,000,000	92,006,734
8/24/1994	United Properties, Cause Nos. 39838-41	7,571,000	20,744,175
	Net Plant Additions		112,422,000
	Fair Value Rate Base		$562,680,669

10. **Cost of Common Equity**. The Commission having determined the fair value of Indiana American's used and useful property must now determine what level of net operating income represents a reasonable return on its investment. While cost of capital is not synonymous with fair rate of return it is typically a major consideration in our determinations of a fair rate of return.

A. **Petitioner's Cost of Equity.** Petitioner's witness Dr. Boquist relied on a proxy group of four publicly traded water companies covered by Value Line. Dr. Boquist performed both a discounted cash flow ("DCF") and capital assets pricing model ("CAPM") analysis. His DCF analysis resulted in an unadjusted cost of equity of 9.79% and CAPM analysis resulted in an unadjusted cost of equity of 10.34%. Dr. Boquist then added a 100 basis point company specific risk adjustment to the results of his DCF analysis and a 150 basis point adjustment to the results of his CAPM analysis. This produced an overall range of estimates of 10.79% to 11.84%. Dr. Boquist recommends a cost of equity of 11.50%.

Dr. Boquist's DCF analysis was based on the 2-stage DCF model, thus his model has two estimates of growth (g) in his DCF model. For the first stage Dr. Boquist assumed that dividends for each company in his proxy would grow over the next ten years as they did in the previous ten years. For the second stage Dr. Boquist assumed that water company dividends would grow at the same rate of nominal GNP. Dr. Boquist's estimate of future nominal growth of nominal GNP is based on the average historical GNP over the last 21 years.

Dr. Boquist's CAPM analysis was based on an arithmetic risk premium and income bond returns. Dr. Boquist argued that if the Commission gives weight to both the arithmetic and geometric risk premium calculations, that it should give the vast majority of its weight to the arithmetic risk premium.

B. **Mr. Kaufman's Cost of Equity.** The Public's witness, Mr. Edward Kaufman used the same proxy group of water companies that Dr. Boquist used, but he estimated a lower cost of common equity than Dr. Boquist. He used both a DCF model and a CAPM analysis and estimated a cost of common equity for Petitioner of 9.50%. Mr. Kaufman's DCF analysis produced a range of 8.14% to 8.28%, while his CAPM analysis produced a range of 7.36% to 9.33%. Mr. Kaufman

concluded that due to Petitioner's somewhat smaller size they had more business risk than the proxy group. To account for Petitioner's company specific risk Mr. Kaufman increased the results of his analysis by 0-25 basis points. This resulted in a range of cost of equity estimates of 7.36%-9.58% Mr. Kaufman then recommended a cost of equity of 9.50%.

Mr. Kaufman relied on the more traditional single stage DCF model. He based his estimate of growth (g) on historical and forecasted growth in earnings per share ("EPS"), dividends per share and book value per share ("BVPS"). Mr. Kaufman also completed a CAPM analysis. His CAPM analysis relied on both an arithmetic and geometric mean risk premium. Mr. Kaufman also relied on total bond returns instead of income bond returns to estimate the market risk premium.

Mr. Kaufman adjusted the results from proxy group to consider Petitioner's specific business and financial risk. He concluded that, based on Petitioner's size and the percentage of equity in its capital structure, Petitioner is similar in risk to that of the proxy group. Mr. Kaufman then adjusted the results of his equity analysis by 0-25 basis points. Mr. Kaufman asserted that a 9.50% cost of equity was reasonable in today's markets. He pointed out the forecasted inflation over the next few years was expected to remain low and asserted that lower inflation rates translates directly into lower capital costs.

C. **Petitioner's Rebuttal.** In rebuttal Dr. Boquist criticized Mr. Kaufman's DCF approach, including his failure to adjust for a full year of forward growth in determining the dividend yield. Dr. Boquist said the half-year forward yield procedure was inconsistent with the mathematical derivation of the model, was theoretically unjustified and would result in the investor perpetually being short one half of the expected dividend growth. Dr. Boquist also disagreed with Mr. Kaufman's use of EPS and BVPS growth rates in determining the perpetual dividend growth rate. Dr. Boquist said BVPS was a particularly poor indicator of dividend paying ability. Dr. Boquist noted that Mr. Kaufman's single-stage DCF model used growth rates for California Water and American States of 2.72% and 3.33% which are well below the historical rate of inflation and much too low to use as perpetual dividend growth rates. Dr. Boquist disagreed with Mr. Kaufman's contention that a forecasted GDP growth rate would be more appropriate in the second stage of Dr. Boquist's DCF model because typical forecasts do not encompass a long-term time frame as required for the second stage.

With respect to the CAPM, Dr. Boquist criticized Mr. Kaufman's use of geometric averages as an inappropriate way of estimating uncertain forward-looking expected returns. Dr. Boquist also said Mr. Kaufman failed to match the bond terms used for the risk-free rate with the 20-year maturity period represented by the Ibbotson data. Dr. Boquist testified that it was incorrect for Mr. Kaufman to use treasury bond total returns as the risk free rate in the market risk premium calculation because they are affected by changes in value. Only the income return (interest) from treasury bonds is truly riskless. Dr. Boquist stated that Mr. Kaufman's company-specific risk adjustment of 0-25 basis points was inadequate. Dr. Boquist said that Mr. Kaufman failed to recognize that since Petitioner's last rate case, risk had increased substantially for both common stocks generally and Petitioner in particular. He testified Mr. Kaufman failed to give any consideration to the significant regulatory

and liquidity risks faced by Petitioner relating to the Commission's polices on acquisition investments and the OUCC's position with respect thereto.

D. Commission Findings. For reasons described hereafter, the Commission finds that a cost of common equity ranges between 9.50% to 11.50%.

There was considerable disagreement between the parties over the mechanics of the DCF model. First regarding the calculation of the forward dividend yield in the DCF model, Dr. Boquist chose the full-year method, while Mr. Kaufman utilized the half-year method. Second, regarding the estimation of the perpetual growth rate (g), Dr. Boquist chose the ten-year historical growth rate of dividends for the first stage of his DCF model and the nominal growth rate of GNP for the second stage of his DCF model. Mr. Kaufman relied upon 10-year, 5-year and forecasted growth rates of dividends, earnings and book value per share.

Dr. Boquist agreed during cross-examination that Dr. Lewellen, testifying on behalf of Indiana-Cites Water Company, used the half-year growth method to estimate the forward dividend yield.

This Commission believes that the DCF remains a viable model to aid in our determinations of Petitioner's cost of equity. As stated in our Final Order in Cause 40103 pages 40-41:

> The Commission has considerable experience with the DCF model for estimating the cost of equity. We are well aware of the advantages and limitations of the various approaches used by each of the witnesses. For example, the half-year method used by the OUCC for calculating the forward yield is the most frequently used approach in this jurisdiction and is rarely a point of contention in DCF analysis. We believe it fairly represents the dividend payments expected and received by investors, while the full-year method employed by Petitioner overstates dividend yield. A recalculation of Petitioner's DCF using the half-year method by the OUCC resulted in a 20 basis point reduction (Sudhoff direct, p. 29). On the issue of deriving growth rates this Commission has sanctioned the use of per share data for earnings, dividends and book value. Northern Indiana Fuel and Light, Cause No. 39145, January 29, 1992 p. 25. In all cases however, the Commission expects the parties to exercise sound judgment when deciding which inputs to include as part of their analysis.

As we stated in Cause 40103 the Commission expects the parties to exercise sound judgment when deciding which inputs to include as part of their analysis. This Commission has concerns regarding Dr. Boquist's implementation of the 2-stage DCF model. Dr. Boquist has used a high estimate of dividend growth (g) for the second stage of his DCF model. Additionally, Dr. Boquist's quarterly DCF analysis assumes that dividends will grow each and every quarter.

In the past this Commission has consistently sanctioned the use of both historical and forecasted per share data. We continue to believe that both historical and forecasted earnings, dividends and book value per share data are useful when employing the DCF model.

There was also considerable disagreement regarding the CAPM analysis. The OUCC has relied on both the arithmetic and geometric mean in estimating the market risk premium while Petitioner relied exclusively on the arithmetic mean premium. Petitioner's reliance on the arithmetic risk premium alone increases the risk premium by more than 150 basis points higher than the blended risk premium used by Mr. Kaufman. In recent rate cases this Commission has given weight to both the arithmetic mean risk premium and the geometric mean risk premium. See p.12 of the Peoples Natural Gas Order in Cause No. 39315:

> As in the Indiana Cities case, [Cause No. 39166, July 8, 1992] we find there is merit in using both the arithmetic and geometric means and that neither result should be relied upon to the exclusion of the other.

This Commission also reaffirmed its position in Indiana American Water Company, Cause No. 40103, Order dated May 30, 1996. On page 41 of that Order this Commission stated:

> The debate over the proposed use of the arithmetic and geometric means is one we consider resolved. As we stated in Indianapolis Water Company, Cause No. 39713-39843, each method has its strengths and weaknesses, and neither is so clearly appropriate as to exclude consideration of the other.
> (Emphasis added)

Dr. Boquist has responded to our finding that both methods should be considered by arguing that if we consider both methods we should give the vast majority of weight to the arithmetic mean. We decline to set such a balance.

We repeat that, while the debate over the proposed use of the arithmetic and geometric means continues, however, each method has its strengths and weaknesses, neither is so clearly appropriate as to exclude consideration of the other.

Statements from Dr. Ibbotson's 1982 edition of Stocks, Bonds, Bills, and Inflation: the Past and the Future support our findings that both methodologies should be given weight. On page 59 Dr. Ibbotson stated as follows:

> The arithmetic mean historical return component is used in making one-year forecasts, since the arithmetic mean represents the average performance over a one-year period. Over a long forecast period, however, the geometric mean historical return represents average performance over the whole period (stated on a compound annual basis). Therefore, we input the arithmetic mean for the one-year forecast, the

geometric mean for the twenty-year forecast, and intermediate values for two, three, four, five and ten-year forecasts.

Both Mr. Kaufman and Dr. Boquist recognized the need to adjust the results of their proxy group for Petitioner's company specific risks. To account for Petitioner's company specific business risks Dr. Boquist increased his estimate of Petitioner's cost of equity by 100-150 basis points, while Mr. Kaufman's company specific adjustment was 0-25 basis points. Having determined the range to be 9.50% to 11.50%, we find that Petitioner's cost of common equity is 10.50%.

11. **Cost of Capital and Capital Structure.** Having determined cost of equity we can now determine Petitioner's cost of capital. When a 10.50% cost of equity is incorporated into Petitioner's capital structure as shown below, the weighted cost of capital is 7.96%.

Capital	Amount	Ratio	Cost	Weighted Cost
Common Equity	$ 169,394,390	39.34%	10.50%	4.13%
Preferred Equity	$ 510,000	0.12%	6.00%	0.01%
Long-Term Debt	$ 221,236,755	51.38%	7.30%	3.75%
Pre-1971 ITC	$ 187,443	0.04%	0.00%	0.00%
Post-1970 ITC	$ 3,415,751	0.79%	8.69%	0.07%
Deferred Income Taxes	$ 33,560,843	7.79%	0.00%	0.00%
Customer Deposits	$ 98,426	0.02%	6.00%	0.00%
Post Retirement Benefits –net	$ 2,184,031	0.51%	0.00%	0.00%
CIAC-Muncie	$ 35,654	0.01%	0.00%	0.00%
Total	**$ 430,623,293**	**100.00%**		**7.96%**

Petitioner and the OUCC computed the debt cost rate by dividing (a) the sum of the annual interest and issuance cost amortization by (b) the amount outstanding less the unamortized issuance costs. Crown Point witnesses Guerrettaz divided (a) the sum of the annual interest and issuance amortization by (b) the amount outstanding. In rebuttal, Ms. Doron stated that Petitioner's method of computing the debt cost rate has been used in numerous rate cases. In this cause we adopt the method used by both Petitioner and the OUCC. The cost rate for Job Development ITC-Post 1970 was calculated as follows:

Capital	Amount	Ratio	Cost	Weighted Cost
Common Equity	$ 169,394,390	43.31%	10.50%	4.55%
Preferred Equity	$ 510,000	0.13%	6.00%	0.01%
Long-Term Debt	$ 221,236,755	56.56%	7.30%	4.13%
Total	**$ 391,141,145**	**100.00%**		**8.69%**

12. **Fair Rate of Return and NOI.**

A. **Petitioner's Position.** In its direct testimony Petitioner proposes to determine its NOI by multiplying its cost of capital by its original cost rate base plus its cost of capital by its proposed acquisition adjustments. Although Petitioner never asserts that its cost of capital is a fair rate of return, the clear implication from its testimony is that the Commission should directly apply Petitioner's cost of capital to determine the appropriate level of net operating income for Indiana American Water Company.

Dr. Boquist testified that the return of a utility should correspond to the return investors could earn on investments of comparable risk in the unregulated sector. If investors can earn a larger return and bear identical risks, or conversely earn identical returns with less risk, by investing in other industries, they will do so. Failure to recognize this fact would make it difficult for utilities to raise capital on a competitive basis. Dr. Boquist expressed the opinion that Petitioner should be allowed to earn a fair rate of return on the fair value of its property similar to the rate of return which unregulated companies of comparable risk earn on the fair value of their assets. Dr. Boquist performed a detailed study to determine that rate of return.

Dr. Boquist first identified a large group of comparable-risk unregulated companies by using the approach advocated by Fama and French in a 1992 study published in the Journal of Finance and in subsequent papers. Fama and French concluded that the size of a firm measured by the market value of its equity ("ME") and the ratio of a firm's book value of equity to a firm's market value of equity (book-to-market equity ratio or "BE/ME") are the two risk factors influencing common stock returns because they have strong ties to economic fundamentals such as profitability and the growth of earnings and assets that have long been associated with investment performance. Fama and French contend these factors explain stock returns better than beta.

Dr. Boquist replicated the Fama and French study approach by performing a computer analysis of nonregulated firms in the New York Stock Exchange, American Stock Exchange and NASDAQ return files from the Center for Research in Security Prices and the merged COMPUSTAT annual industrial files of income statement and balance sheet data. The time period covered by this study extended from 1963 through 2000. The companies were then partitioned into matrixes for each year based upon the two key Fama and French risk factors. Dr. Boquist then developed for each year a portfolio of comparable companies reflecting the range of ME and BE/ME values for his four proxy companies, the results which would be predicted by the Fama-French. Dr. Boquist then determined the pre-tax rate of return earned by the comparable companies on the

depreciated replacement cost of their assets. To determine replacement cost, Dr. Boquist used the techniques described in the work of Lindenberg and Ross, published in the Journal of Business in 1981, which prescribes a methodology for estimating replacement cost of a firm's assets from its accounting statements. This method considers price level changes, technological change, real economic depreciation and investment in new plant and equipment. The same 1.34% technological change adjustment used by Dr. Boquist in his determination of Petitioner's depreciated replacement cost was used for the comparable companies. Dr. Boquist testified that he measured before income tax operating profit to eliminate the effects of leverage (the interest of which affects income taxes), the tax strategies some firms employ and tax loss carryforwards and carrybacks available to some companies. From this study Dr. Boquist determined that the average annual pre-tax rate of return on replacement cost for the comparable companies from 1965 through 2000 was 11.88%. (Petitioner's Ex. JAB, p. 55.) He concluded that a rate of return of 11.88% before income taxes on the depreciated replacement cost of Petitioner's property, would, therefore, be fair and reasonable.

B. **Public's Position.** As discussed above the Public used a similar process as Petitioner did to estimate an appropriate level of NOI for Indiana American Water Company. The key difference is that the Public did not believe it was appropriate for Petitioner to earn a return on its proposed acquisition adjustment from its merger with Northwest Water Company or its purchase of the United Water properties.

Through its witness Mr. Edward R. Kaufman the Public challenged Dr. Boquist's return on replacement cost analysis. Mr. Kaufman had several concerns regarding Dr. Boquist's Fama-French analysis. The key concerns expressed by Mr. Kaufman were: Dr. Boquist's return on replacement cost analysis does not react to changes in capital markets: Dr. Boquist's analysis is based on operating returns while the Fama-French analysis is based on market returns: and the results of Dr. Boquist's analysis are contrary to the model.

Specifically Mr. Kaufman asserted that Dr. Boquist's return on replacement cost analysis does not react to changes in market conditions. In models such as the DCF or CAPM, changes in investor expectations are quickly incorporated into expected returns. That is not the case in Dr. Boquist's return on replacement cost analysis. For example, a change in interest rates will impact investor expectations, and the results of both a CAPM or DCF analysis will, in turn, quickly react to reflect the change in investor expectations. The U.S. Federal Reserve cut interest rates eleven times in 2001. However, Dr. Boquist's return on replacement cost analysis fails to either react to or incorporate the change in interest rates over the last year into his return on replacement cost analysis.

Next Mr. Kaufman criticized Dr. Boquist's use of operating returns. The Fama-French analysis assumes that firms in the same grid location will earn similar market returns. Market returns refers to price appreciation plus dividends. Dr. Boquist's analysis is based on net operating profit. Dr. Boquist uses operating income before taxes as his measure of return in estimating his return on replacement cost. While Dr. Boquist's analysis assumes that firms in the same grid location will earn similar operating returns, he presents no evidence to support his opinion that the Fama-French analysis can be extended to include his assumption. Mr. Kaufman agreed that there will be some relationship between market returns and operating returns, but he stated that there were many other factors which will influence market returns that may have little or no impact on operating returns. Mr. Kaufman asserted that operating returns and market returns are distinct. Companies may have similar market returns yet have very different operating returns.

Mr. Kaufman demonstrated that the results of Dr. Boquist's return on replacement cost analysis produced results that were contrary to the model's predicted results. The Fama-French model predicts that: 1) smaller companies will earn a higher rate of return than larger companies and 2) companies with a higher book-to-market ratio will earn a higher rate of return than companies with a lower book-to-market ratio[2]. In his workpapers, Dr. Boquist provides a calculation of returns by grid location for each of the 25 grid locations on his 5 by 5 grid. He does this on a year-by-year basis for each year from 1965-2000 and on a composite basis for all years. Mr. Kaufman provided a schedule that replicates the composite or average results of Dr. Boquist's analysis for all years (Schedule 4, page 3). Mr. Kaufman also included a copy of Petitioner's workpaper (Schedule 4, page 4) that contains the data provided in Schedule 4, page 3. In his analysis Dr. Boquist separates the companies into quintiles, as measured by market equity, and get larger going left to right (grid locations 1 to 5). Companies are also separated into quintiles as measured by book-to-market ratio with an increasing book-to-market ratio going top to bottom (grid locations 1 to 5). Thus, companies in grid location (1,1), which are in the upper left hand corner have the smallest market equity and the lowest book-to-market ratio. Conversely, companies in grid location (5,5), which are in the lower right hand corner, have the largest market equity and have the highest book-to-market ratio. Under the Fama-French model smaller companies should earn higher rates of return than larger companies, therefore rates of return should increase as one moves horizontally from grid 5 to 1 (right to left). Likewise, under the Fama-French model, where firms with a lower book-to-market ratio should earn lower rates of returns, rates of return should increase as one moves vertically from grid 1 to grid 5 (top to bottom).

Mr. Kaufman then explained that figures in Dr. Boquist's analysis did not follow the theory put forth by the Fama-French model. In fact, grid location (5,1) which contains the largest companies with the smallest book-to-market ratio shows the highest rate of return (20.27%) when, in fact, the theory dictates it should have the lowest rate of return. Additionally, under the Fama-French model the highest rate of return should appear in grid location (1,5) which contains the smallest companies with the highest book-to-market ratio. But under Dr. Boquist's analysis grid location (1,5) has one of the lowest rates of return (8.57%).

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2. According to the Fama-French model a firm's book-to-market ratio is a measure of financial distress. Firms with a high book-to-market ratio (a low market-to-book ratio) are financially distressed and require a higher rate of return.

During rebuttal testimony and cross examination Dr. Boquist argued that his results were consistent with the Fama-French model and that one should expect small companies will simultaneously earn a lower operating rate of return on replacement cost while earning a higher market rate of return on market value than large companies with a similar book-to-market ratio.

Additionally Mr. Kaufman compared the final results of Dr. Boquist's analysis in this case to the results in his last case. This comparison caused Mr. Kaufman to question the validity of the study's results. Although Dr. Boquist and Mr. Kaufman disagreed on Indiana American's cost of equity, both of them estimated a cost of equity that was similar to what each witness estimated in Indiana American's last rate case, Cause No. 41320. Despite this fact Dr. Boquist's estimated return on replacement cost has increased from 7.58% in Petitioner's last rate case to 11.88% in Petitioner's current case.[3] Between Petitioner's last rate case and this case he had increased his estimate of Petitioner's cost of equity by 25 basis points and his estimated fair rate of return by 430 basis points. Yet, Dr. Boquist did not explain this dramatic increase in his estimated return on replacement cost during a period where capital costs have remained relatively stable.

Finally, Mr. Kaufman showed that Dr. Boquist performed no review or analysis of his results to test the validity of his study. For example, in his analysis there are approximately 27,370 return on replacement cost estimates from 1990-2000. This sample has an average return of 6.04% and a standard deviation of 17.12%. According to Mr. Kaufman such a high standard deviation raised concerns, in addition to the concerns he expressed earlier in his testimony, and should not be ignored. In his opinion, Dr. Boquist had not demonstrated the validity of his analysis and it should not be given any weight by this Commission.

C. **Commission Findings.** We agree that there are numerous concerns with the application of the Fama-French methodology. The use of operating returns while the Fama-French model is based on market returns is certainly one such difference. Beyond some of the mechanical deficiencies in the results of Dr. Boquist's model, any model that shows increasing rates of returns during periods of stable or declining capital costs raises questions.

In the past four cases where Dr. Boquist has filed a similar return on replacement cost analysis based on Fama-French model it has produced the following results. In three previous studies the results were clustered around 7.25%. The current study produces a usually higher result. This is particularly strange since the current study has overlapping years with the previous studies. The addition of a few years should not have this dramatic of an impact on the study's overall results.

Cause Nos. 40667 and 40703 (same study)	7.28%
Cause No. 40103	7.03%
Cause No. 41320	7.58%
Cause No. 42029	11.88%

Dr. Boquist recommend 11.25% COE in Petitioner's last case and 11.50% in Petitioner's current case.

Finally, the results of Dr. Boquist's analysis fail any test of reasonableness when compared to the results that would be generated under original cost ratemaking for the identical NOI. As we have stated in the past, although the Commission does not advocate using the OUCC's original cost test for determining the reasonableness of a fair value finding, the test can be performed to exclude results that are outside the range of reasonableness under any methodology. According to Dr. Boquist's analysis Indiana American could reasonably request a pre tax operating income of 11.88% times $763,952,972 or approximately $90.8 million. To produce a pre tax operating income would require us to authorize a cost of equity in excess of 25.0%.

Despite Petitioner's emphasis on fair value and fair rate of return, their case is essentially an original cost case plus a return on its proposed acquisition adjustments. Neither party's case-in-chief presented a single fair rate of return to be multiplied by a fair value rate base to determine a proposed NOI. Despite the lack of specific evidence the Commission must make a finding on fair rate of return. The record does in fact provide ample evidence to make a finding on fair rate of return. As discussed above we have rejected Petitioner's proposal to earn a return on its merger with Northwest Indiana Water Company or its acquisition of United Water properties; Cementville, Peoples, and Shorewood. Having considered the evidence on valuation, determined original cost and fair value, we must continue our efforts to balance the interests of Indiana American's owners and customers by determining what level of net operating income represents a reasonable return. This determination requires a balancing of the interests of the investors and the consumers. In Bethlehem Steel Corp. v. Northern Ind. Public Serv. Co. (1979), Ind. App., 397 N.E. 2d 623,630, the court explained that "[w]hat annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts."

We will use the following standards and criteria to determine a fair rate of return on Petitioner's investment in its utility plant:

(i) Return comparable to return on investments in other enterprises having corresponding risks;

(ii) Return sufficient to ensure confidence in the financial integrity of the Petitioner;

(iii) Return sufficient to maintain and support the Petitioner's credit;

(iv) Return sufficient to attract capital as reasonably required by the Petitioner in its utility business.

One recognized method for evaluating the reasonableness of a utility's allowed return involves investigation of the utility's capital structure. From such investigation, we can develop the overall weighted cost of capital. This cost of capital may then be considered in determining a fair return.

Having previously determined the Petitioner's fair value rate base is $562,680,669, it is our duty to determine a fair rate of return that can be used to calculate a fair dollar return for Petitioner's net operating income.

It is clear that because the cost of capital and the fair value rate base are derived in different manners the two may not be directly applied to each other. If the fair value rate base is found to be other than the original cost rate base, determining return by multiplying the cost of capital including a consideration for inflation by a fair value rate base which also includes inflation would overstate the required return by reflecting a redundant consideration of the anticipated impact of inflation on the value of Petitioner's property.

The ratemaking process involves a balancing of all these factors and others; especially a balancing of the owner's or investors' interest with the consumer's interest. On the one side, the rates may not be so low as to confiscate the investor's interest or property; but, on the other, the rates may not be so high as to injure the consumer by charging an exorbitant price for service and at the same time giving the utility owner an unreasonable or excessive profit. PSC v. City of Indianapolis, 235 Ind. 70, 131 NE2d 308, 318 (1956). Therefore, the results of any return computation will be tempered by the Commission's duty to balance the respective interests involved in ratemaking. Finally, the end result of this Commission's Orders must be measured as much by the success with which they protect broad public interest entrusted to our protection, as by the effectiveness with which they maintain credit and attract capital.

The Commission further finds that the foregoing is a proper application of relevant Indiana statutes as clarified by the courts. The return allowed to Petitioner is reasonable and just and in compliance with the October 31, 1985 decision of the Indiana Court of Appeals in Indianapolis Water Co. v. Public Service Commission of Indiana (1985) 484 NE2d 635.

Furthermore, this Commission has asserted in previous rate cases that, since the fair value rate base contains inflation that it is historic and not prospective inflation, it should be removed from the debt component of the cost of capital to estimate a fair rate of return. For example, in Indiana-American Water Company, Cause No. 40103, May 30, 1996, p. 48, the Commission explained as follows:

> In order to avoid over-compensating Petitioner for the effects of historical inflation it is necessary to remove the historical inflation component from the costs of capital to derive a fair return.

The Commission, after deducting from the embedded cost of debt a historical inflation rate of 3.9%, (Petitioner's Exhibit JLC-1, Schedule 4), finds the adjusted cost of capital of 5.93%.

Based on the evidence of record, we believe that a fair rate of return of 5.93% will provide Petitioner with a fair and reasonable return on the fair value of its used and useful properties. When

applied to a fair value rate base of $562,680,669 a 5.93% fair rate of return will produce a required NOI of $33,368,321.

13. Operating Results Under Present Rates. Pursuant to the Prehearing Conference Order, the test year to be used for determining Petitioner's actual and pro forma operating revenues, expenses and operating income under present and proposed rates is the 12 months ended March 31, 2001.

A. **Uncontested Revenue Adjustments.** Petitioner's operating revenues during the test year were $116,277,954. Petitioner made adjustments to this figure for bill analysis reconciliation, removal of unbilled revenue, large customer consumption (except for Whiteland), and annualization of the acquisitions of Freeman Field and Prairieton, which adjustments were not contested. Petitioner accepted the OUCC's adjustment for residential and commercial customer growth.

B. **Contested Revenue Adjustment Usage Normalization.** Both Petitioner and the OUCC proposed to adjust test year revenues to reflect the normalization of residential customer usage. A usage normalization adjustment is to account for potential unusual or unseasonable conditions during the test year which impact the demand for water. It is accomplished by comparing the test year usage to the average usage over an historical period. The difference between Petitioner's and the OUCC's adjustment is the historical period chosen over which average consumption is computed. Petitioner proposed to use a three-year average whereas the OUCC proposed a five-year average. Both adjustments have the effect of increasing revenues from the test year levels; however, the OUCC's adjustment would increase revenues to a greater extent. No other party took a position with respect to usage normalization.

OUCC witness Judy Gemmecke explained her objection to Petitioner's three-year average. She testified that in Cause No. 41320 Petitioner used a five-year average but has now switched to a three-year average in this case. In her opinion, this switch was made without justification. According to Ms. Gemmecke, Petitioner did not present any evidence that weather variations in Indiana changed dramatically over the last three-year period versus a five-year period to justify the use of a shorter period.

Petitioner's witness Duane D. Cole testified on rebuttal regarding why a three-year average is being proposed for this case. According to Mr. Cole, Petitioner's base consumption per customer (household usage exclusive of outside usage) has decreased over the past several years and all indications are that it will continue to decline. He explained that usage normalization based upon longer historical averages will overstate revenues since the recent trend in base consumption reflects a more severe decline. If an adjustment is to be made at all, Mr. Cole explained that the period over which the average is to be computed should be shorter rather than longer to avoid including years where the base consumption per customer is higher than it is anticipated to be again, thus overstating normal usage. Mr. Cole presented graphs which show the residential consumption per customer during the 6 winter months of the past 5 years. He states that he chose the wintertime, so as to eliminate variables such as lawn sprinkling, car washing and other outside water uses, thus reflecting

the base usage for residential customers. This graph shows a declining trend for consumption per customer for the months examined. He testified that the reduced consumption is due to efforts on multiple fronts to conserve water. The Building Officials and Code Administrators ("BOCA") have promoted building codes requiring low flow plumbing fixtures to be installed in new and remodeled construction. He also testified that low flow toilets reducing the flow required for each flush from approximately 7 gallons to 1.3 gallons per flush, low flow shower heads, faucet combinations and other plumbing fixtures have had an impact on consumption levels. In addition, old style high capacity top loading washing machines use between 40 and 44 gallons of water for a complete cycle, whereas modern front load machines use 15 to 19 gallons of water. Mr. Cole states that as new homes are constructed and older homes remodeled with these lower usage fixtures and as appliances are replaced, average consumption per customer will continue to decline. As a result of the declining consumption, Mr. Cole testified that the use of a three-year average is more accurate for usage normalization than a five-year average. He noted that the most predominant variable for which the usage normalization attempts to adjust is rainfall and that over Petitioner's proposed three-year period, rainfall approximates the thirty-year average. He opined that, except for the declining consumption per customer created by conservation devices and as shown by winter usage, the three-year average would be nearly perfect for purposes of accomplishing the objective of the usage normalization adjustment. Mr. Cole summarized that it would be inappropriate to include any further historical years, because the older data will inappropriately skew the results even more as a result of the consumption trend. (Petitioner's Ex. DDC-R, pp. 2-5).

The purpose of the usage normalization adjustment is to adjust test year revenue levels so as to eliminate the effects of unusual events and weather variations. Ms. Gemmecke offered no explanation for why 5 years is better than 3 years. Mr. Cole, on the other hand, did explain his rationale. We are persuaded by Mr. Cole's analysis that by using the five-year average we will be reflecting a base consumption level greater than current trends indicate thus overstating revenues. Because weather during the three-year period approximates the thirty-year average, the use of the three-year period appropriately captures this most significant variable for which the usage normalization is an attempt to adjust. We therefore find that Petitioner's proposed three-year average for purposes of usage normalization is appropriate.

i. **Whiteland Leak Repairs.** Indiana-American proposed a $53,148 revenue adjustment to account for the reduction in sales to the Town of Whiteland ("Whiteland") based upon Whiteland's discovery and repair of significant leaks. Whiteland is one of Petitioner's sale-for-resale customers. During the test year, Whiteland engaged a professional leak detector who discovered leaks in Whiteland's water distribution infrastructure. Whiteland repaired these leaks in the Spring of 2001. Petitioner's witness Jennifer K. Tower calculated Petitioner's adjustment based upon Whiteland's estimate of the amount of water lost through the repaired leaks on an annual basis. Based on the evidence demonstrating that an estimated 102,145 cubic feet ("ccf") of water per year was escaping from these leaks, Indiana-American conservatively estimated that Whiteland had purchased approximately 60,000 ccf of water during the test year that was lost to leaks that have now been repaired. Although the OUCC did not dispute that a revenue adjustment was necessary, Ms.

Gemmecke proposed to adjust Indiana-American's revenue by only $23,994. The OUCC's adjustment was calculated by comparing the test year sales to the prior year.

The source for disagreement between the OUCC and Indiana-American on this issue is the calculation of the amount of water lost through the leaks. Nobody knows for sure how long the leaks existed. As Ms. Tower explained on rebuttal, her objection to the OUCC's comparison is that its accuracy is dependent on the leaks appearing sometime between the two periods the OUCC compared. However, if one of the leaks repaired existed during both periods, the OUCC's calculation would result in no adjustment being made for the repair. As Ms. Tower noted, Whiteland retained the leak detection expert because of excessive unaccounted for water, so it is reasonable to expect that these were not new leaks.

Based on the evidence, we find Indiana-American's method of estimating the amount of water Whiteland lost to leaks was the most accurate. The OUCC methodology fails to consider when the leaks occurred. Consequently, we find that Indiana-American's adjustment of $53,148 should be accepted for ratemaking purposes and reject the OUCC's adjustment.

ii. **Accrued Utility Revenue**. Petitioner presented a balance sheet, which indicated that Petitioner had $6,322,250 of Accrued Utility Revenues on March 31, 2001. No party proposed or suggested that any adjustment to test year revenues should be made on account of this amount. Mr. Guerrettaz, on page 6 of his testimony stated that the test year in this cause "is representative of a normal operating year." On page 18 of his testimony, however, he states that "the Commission should take note of the $6,322,250 of Accrued Utility Revenues." At the hearing held in this Cause, Mr. Guerrettaz clarified that he was not proposing any adjustment regarding Petitioner's level of Accrued Utility Revenues. (Tr., pp. E8-9).

On rebuttal, Mr. Cutshaw testified that accrued revenues are unbilled revenues, which Petitioner records in accordance with Generally Accepted Accounting Principles. He opined that there is no need to offset this amount against the revenue requirement because the Company has included a full twelve months of revenues for the customers in the rate case. On cross-examination, he explained the adjustments which assure a full twelve months of revenue are already reflected and that Petitioner's treatment of unbilled revenues is the same treatment which has been approved in prior cases. (Tr., pp. H9-13 and 67).

Mr. Guerrettaz stated that the test year in this cause is representative of normal operations, hence the Petitioner has included twelve months of revenues in its pro-forma income statement and we find that no adjustment has been proposed or is required due to the level of Accrued Utility Revenues on Petitioner's balance sheet.

The Commission finds test year revenue, adjusted for fixed, known and measurable changes to have occurred within twelve months of the test year to be $118,736,711.

C. **Uncontested Operating Expense Adjustments**. There were no material differences at pro forma present rate levels between the accounting exhibits of Indiana-American and the other

parties regarding adjustments for pension expense, insurance expense, customer accounting expense, and amortization expense. The OUCC accepted Petitioner's adjustments to annualize labor expense, management fees, group insurance (including FAS 106), waste disposal, rent expense, miscellaneous expense (including temporary employees, 401K and ESOP costs, deferred revenue shortfall from Cause 41408), depreciation expense, and other taxes (IURC fee, property, and payroll taxes), except for the specific contested items mentioned subsequently. In addition, Petitioner did not challenge the OUCC's proposed adjustments for allocation of compensation for four employees to other states, addition of an omitted employee in the Southern Indiana Operation, allocation of a portion of the Corporate Office lease to the Service Company and back to Petitioner through management fees, and certain adjustments to miscellaneous expenses, including deletion of David Saylor consulting fees and non-recurring items.

D. **Contested Operating Expense Adjustments.**

i. **Incentive Pay Program.** OUCC witness Dana Lynn proposed to adjust Petitioner's labor expense, management fees, and payroll taxes so as to remove Petitioner's Annual Incentive Program ("AIP") as a cost of service. She testified that incentive pay is not reasonably necessary to the provision of utility service. According to Ms. Lynn, incentive pay is typically a benefit used to motivate employees to make the utility more profitable for the shareholder. She therefore concluded that Petitioner should pay incentive compensation out of its authorized return rather than through operating expenses.

On cross-examination of Mr. Eckart, we learned that Petitioner has included only 85% of the AIP in its pro forma level of expense. (Tr., pp. F50-51). Thus, part of the AIP is being funded through the authorized return and part is funded through rates under Petitioner's proposal.

Although Ms. Lynn's testimony is silent as to the precise operation of Petitioner's plan, Mr. Eckart set out a detailed description of the AIP in his rebuttal testimony. (Petitioner's Ex. JEE-R, pp. 16-23). Mr. Eckart noted that all salaried employees who are exempt from overtime pay participate in the AIP. Mr. Eckart explained that the plan consists of three key features – gatekeepers, performance goals and individual multipliers. First, the AIP contains a gatekeeping component that ensures that AIP payments are made only when two targets are met: A minimum earnings per share ("EPS") of American and the attainment of individual performance expectations of the participating company and employee. (Id., pp. 17).

Mr. Eckart testified that if the gatekeepers are met, the precise amount of the AIP payout is based upon achievement in two equally weighted performance goals. Specifically, the participant's overall performance goals are divided into two equally weighted categories – Financial Performance Goals and Operational Goals. The aim of the Financial Performance Goal is to have the participant achieve a return-on capital equal to the weighted average cost of capital of the company. The Operational Goals are a function of customer satisfaction. The AIP first measures customer satisfaction through a detailed customer survey. This survey evaluates customer satisfaction through four categories: "Overall satisfaction with the Company"; "Overall satisfaction with water quality"; "Leader in the water industry"; and "Overall utility value." (Id., pp. 18). The Operational Goal is

measured as a percentage of survey respondents who stated that they were satisfied or very satisfied with the four stated categories. For a participant to receive a payout from the AIP, the subsidiary must achieve at least a 60 percent score in the Operational Goal category, meaning at least 60 percent of the survey respondents reported that they were satisfied or very satisfied with the company. Additionally, the Operational Goal score will be reduced if a district experiences any of the following four service quality situations: (1) "a public notification or customer advisory is issued due to a violation of any state or federal drinking water regulation or any monitoring or reporting failure occurs"; (2) "a customer experiences an interruption of water service due to a facility failure for a period extending longer than twelve hours without an alternative supply of drinking water being available"; (3) "any customer experiences more than two intermittent service interruptions extending for longer than a twelve-hour duration"; and (4) "water usage is curtailed due to the inability to meet customer demands." (Id., pp. 20.) Mr. Eckart testified that avoiding these situations is necessary to meet the basic service expectations of the Company's customers.

To calculate the precise amount of the AIP for an employee, the third component – the Individual Performance Multiplier – must be factored into the equation. This value allows the participating company to adjust the AIP award based on the actual performance of the employee receiving the award. (Id.)

Mr. Eckart testified that Ms. Lynn failed to account for the substantial benefits to customers achieved through the Performance Goals of the AIP. As demonstrated by its numerous mechanisms for measuring and rewarding customer satisfaction, the AIP is intended to benefit both shareholders and customers, and these mutual benefits are in fact interrelated. Financial performance allows the Company to attract the capital and qualified people necessary to provide the service desired by customers. Customer satisfaction is important for financial success which benefits shareholders.

Mr. Eckart testified that it was not unusual for a company such as Petitioner to provide this type of pay arrangement. He testified that 72 percent of utilities provide more than one variable pay plan and that 93 percent of all companies that provide incentive plans provide them to middle management. Moreover, Mr. Eckart provided a table that measures the types of compensation plans offered by utilities and other companies. This table shows that reward based systems, including incentive pay plans, are common:

	Utilities	All Industries
Merit Pay	85.7%	75.2%
Skill Based Pay	14.3%	15.5%
Bonus	57.1%	65.2%
Incentive Pay	28.6%	28.2%
Key Contributor	0.0%	7.3%
Team Incentives	28.6%	13.0%

We took administrative notice of two of our previous orders that guide our analysis of this

issue. First, in Indiana Natural Gas Corp., Cause No. 40382 (IURC 10/2/96), an order cited by Ms. Lynn, the Commission accepted an OUCC adjustment to remove the utility's profit-sharing plan on grounds that the expense was not reasonably necessary for utility service. In that case, the petitioner included as an expense $60,000 for the plan, which was characterized solely in terms of profit sharing. There were no operational performance objectives in the plan; only financial performance was considered. The utility attempted to justify this expense on grounds that it was necessary for employee retention. The problem with this argument was that the utility's work force was in Orange County, Indiana, and the profit sharing package caused the average salary to be double that of the average wage for the area.

The second Order, PSI Energy, Inc., Cause No. 40003 (IURC 9/27/96), was issued the week before the Indiana Natural Gas Order and therefore reveals our approach to two different types of plans in a relatively short timeframe. We allowed as a recoverable expense PSI's "annual incentive plan." The PSI Order shows that, contrary to Ms. Lynn's assertions, the Commission has found incentive pay programs to be reasonably necessary for the provision of utility service. The PSI plan, like Petitioner's AIP, was not a pure profit-sharing plan. The plan acted as an incentive for company-wide improvement which related directly to the quality of service to the customers. Indeed, like the AIP, the PSI plan was based on an equal division of corporate financial goals and individual performance measures. In fact, most of the evidence and discussion in the cause focused on the calculation of PSI's performance level, a fact that suggests that the OUCC, the intervenors and the Commission recognized that the plan did provide customer benefits and was reasonably necessary. Further, as with the AIP, PSI had not sought recovery of 100% of the incentive pay. Ultimately, we approved recovery of incentive pay in PSI because the compensation was reasonably necessary for PSI to be competitive in attracting its workforce.

Two things can be taken from these two orders: (1) a pure profit-sharing plan which only incents employees to become more profitable may be more appropriate for funding solely by the shareholders than a plan which also ties compensation levels to better service to the customers; and (2) a plan which causes compensation to exceed levels which are reasonably necessary for the utility to attract its workforce should be disallowed as an unnecessary expense. Using these guideposts, we find that Petitioner's AIP should be recovered through rates at the level proposed by Petitioner.

First, Petitioner's plan is not a pure profit-sharing plan. An associate's incentive pay will be reduced based upon drinking water regulation violations, service interruptions, usage restrictions, and poor customer satisfaction. Ms. Lynn admitted that these include aspects that benefit the customer. (Tr., pp. E38-40). Second, Ms. Lynn could identify only one other water utility in the State with a comparable work force and which competes with Petitioner for employees. That other utility also has an incentive pay program, and Ms. Lynn was unable to state whether the other utility's total compensation package was less than or greater than Petitioner's. (Tr., pp. E41-44; Petitioner's Ex. CX-2). Thus, it cannot be concluded that Petitioner's AIP causes the compensation levels to reach excessive or unnecessary levels. Thus, we find that Ms. Lynn's proposed adjustment should be rejected.

(ii) **Normalization of Work Hours.** As has been the case in the last few rate cases, Petitioner adjusted test year labor expense to reflect normalization of work hours in an average year. Ms. Lynn opposed Petitioner's adjustment to 2,088 hours per year for hourly associates in determining pro forma labor expense. She claimed that this was not the amount of work hours during either the test year or the 12 months following. Accordingly, she opposed the adjustment of test year labor expense to reflect this level of normalized hours in rates in this case.

Mr. Cutshaw explained the basis for the adjustment. He said that 2,088 hours has been used in the last four rate cases based upon this Commission's ruling in Cause No. 39215. He stated that while there may have only been 2,080 hours during the test year and during the 12 months following, there are 2,088 hours during calendar years 2001, 2002, and 2003, and 2,096 hours during calendar year 2004. Therefore, under the OUCC's proposal, rates would be set based upon a level of work hours lower than what will be experienced during any year of the expected life of these rates. Mr. Cutshaw stated if the Commission were to accept the OUCC's position, the Commission would have to use 2,096 hours in future cases where the year following the test year will include 262 working days, as it will in 2004. He further stated that Ms. Lynn's adjustment was incorrectly calculated in that she did not adjust only the amount which was recorded to labor expense. Further, she removed hours of individuals for whom the Company did not make the normalization adjustment. Those individuals have union contracts which require them to work more than the standard number of hours or to be paid for holiday hours and vacation times.

We have reviewed our Order in Cause No. 39215 where we first approved the use of normalized hours. In that case, Petitioner had computed its labor expense based upon 2,096 hours, which was the number of work hours for the 12-month adjustment period, as Mr. Cutshaw indicates will be the case in the year 2004. The OUCC in that case had originally proposed that labor expense be based on 2,080 hours based upon the test year level, but at the final hearing, proposed the normalization of hours to 2,088 work hours per employee. "OUCC witness Lesa S. Paul examined the work hours in each of 12 consecutive 12-month periods. In 7 of those 12-month periods the hours worked were 2,088 and the average of all 12 annual periods was approximately 2,088." Order, pp. 4-5. Based upon the evidence, we found in that Order:

> The Prehearing Conference Order provides that adjustments should be made for changes which are fixed, known and measurable and which will occur within 12 months after the end of the test year. It is undisputed that 2,096 work hours per employee, in fact, will occur during the 12 months following the test year. This fact is fixed, known and measurable. However, as Ms. Paul also testified, a 2,096 work hour year will not again occur during the period she analyzed. The Commission finds that for purposes of this Cause, 2,088 work hours should be used in the adjustment consistent with the OUCC's revised proposal. This is a representative level of work hours per employee. This amount can also be derived by dividing the number of days in a normal year (365) by the number of days in a week (7), multiplying the result by 40 hours per week and adding 2 hours to account for the occurrence of the leap year every 4 years. Therefore, it can be viewed as giving some

consideration to the additional labor costs resulting from the leap year. (Id.)

We approved in that case the normalization of work hours when strict adherence to the adjustment period would result in the use of more work hours than will typically be the case. When one normalizes, there will be occasions where the effect will be to increase from the test year and occasions where the effect will be to decrease from the test year. It would be inappropriate to approve normalization of work hours only when the effect is to reduce the adjusted test year level. Accordingly, we find that Ms. Lynn's position should be rejected and that Petitioner's proposed adjustment to the normalized level of work hours should be accepted.

(iii) Vacant Positions at Conclusion of Test Year End. OUCC witness Lynn proposed to reduce Indiana-American's adjustment to Labor and Employment Expense by $348,796 to account for six positions that were vacant during the entire test year. (Public's Ex. 1, pp. 16-17.) Mr. Cutshaw opposed Ms. Lynn's adjustment.

Mr. Cutshaw testified that the six positions at issue were (1) Director Human Resources, (2) Communications Assistant, (3) Executive Secretary, (4) Manager Information Technology, (5) Engineering Technician, and (6) Maintenance Specialist. (Petitioner's Ex. JLC-R, pp. 15-16.) Ms. Lynn incorrectly asserted that all of these positions were vacant during the entire test year. Mr. Cutshaw's testimony demonstrates that the Director of Human Resources position did not become vacant until the seventh month of the test year and the Manager Information Technology position was vacant only two and a half months of the test year.

We find that Ms. Lynn's proposed adjustment should be rejected. Indiana-American provided testimony that each of these positions would be filled by March 31, 2002 (Petitioner's Ex. JLC-R, p. 15) -- within the adjustment period provided by the Prehearing Conference Order in this cause. In fact, Mr. Cutshaw provided evidence that Indiana-American had already filled the position of Director of Human Resources (Petitioner's Ex. JLC-R2, p. 1), Communications Assistant (id., p. 2), and Executive Secretary (id., p. 3). Furthermore, Indiana-American is actively seeking to fill the positions of Manager Information Technology, Engineering Technician (id., p. 4), and Maintenance Specialist (id., p. 5). Mr. Cutshaw opined that these positions should remain in Indiana-American's pro forma labor expense, except as adjusted for the difference in the actual salary for the two employees now serving as Communications Assistant and Executive Secretary which amounts to ($21,406). We have previously acknowledged that "companies incur employee turnover in the normal course of events." See Gary-Hobart Water Corp., Cause No. 38996, pp. 17-18 (IURC 4/3/91) (rejecting the OUCC's proposed adjustment to labor expenses for a position that was vacant during part of the test year and had not been filled as of the time of the rate case). We find that these expenses are fixed, known and measurable and should be recovered and reject the OUCC's proposed adjustment. We accept Indiana-American's proposed adjustment to account for the difference in the actual salary for the employees filling the positions of Communications Assistant and Executive Secretary which amounts to ($21,406).

(iv) **Shared Services Initiative.** In Cause No. 42043, Petitioner has sought our authority to relocate its accounting records outside the State of Indiana to New Jersey where they will be kept at the Shared Services Center which will be performing various accounting-related functions for all of the American regulated subsidiaries. Our approval was sought because Ind. Code §8-1-2-15 requires that "[n]o books, accounts, papers, or records required by the Commission to be kept within the state shall be at any time removed from the state, except upon such conditions as may be prescribed by the Commission." We have not yet issued an order in that Cause, and so Petitioner continues to maintain its books and records in Indiana. During the interim, Petitioner is participating in the Shared Services Center to the extent the participation does not require the relocation of Petitioner's records pending our resolution of the request in that cause.

Mr. Cutshaw explained the adjustments related to Petitioner's proposed Shared Services Initiative. American has announced Shared Services Initiatives that will consolidate certain accounting/financial services and call center functions over the next two years. Treasury, cash management and accounting functions were consolidated in late 2001. A system wide customer call center was opened in April 2001. Conversions to the new call center will take place over the next years. The Shared Services Center will assume primary responsibility for such areas as accounts payable, cash management, fixed asset management, general accounting, payroll processing, taxes and associated benefit coordination. Mr. Cutshaw made a series of five adjustments to reflect the implementation of the Shared Services Center. These adjustments were labor-related and also included adjustments to management fees to reflect the operating costs that will be incurred by the Shared Services Center and then allocated to the regulated affiliates based on the number of customers. In addition, the adjustment included a ten-year amortization of the implementation costs allocated to Indiana-American for establishing both the Shared Services Center and the Customer Call Center.

Ms. Lynn explained the OUCC's position with respect to Shared Services. She noted that the OUCC opposed implementation of the Shared Services Initiative in Cause No. 42043. In that case, the OUCC has noted that it is currently anticipated that the increase to management fees as a result of the implementation of the Shared Services Initiative will result in higher costs of approximately $180,000 annually as compared to current costs. Ms. Lynn noted that, despite the anticipation of higher costs, Petitioner's proposed adjustment in this case has a net effect of zero on Petitioner's revenue requirements. A zero impact on revenue requirements was accomplished by limiting the adjustment to management fees to a "plug" number. As the OUCC witness did in Cause 42043, Ms. Lynn objected to the allocation of implementation costs of the Shared Services Center based upon the number of customers as required by the affiliated interest contract on file with the Commission. She noted that use of this allocation methodology produces large savings in some states, while it causes costs in Indiana apparently to increase. The reason Petitioner will not see the larger savings is because Petitioner has already achieved significant savings that have not yet been achieved in other states. Further, she objected to the decision to exclude unregulated affiliates from participating in the Shared Services Center.

In addition to the adjustments Petitioner identified, Ms. Lynn identified further adjustments

as a result of the Shared Services Initiative. She proposed adjustments to labor expense to reduce the salary of Mr. William Wolf and the elimination of one-fourth of Petitioner's Corporate Office lease to reflect space which is now vacant due to the elimination of positions in Indiana.

On rebuttal, Mr. Cutshaw disputed the adjustment to Mr. Wolf's salary, testifying that at a minimum, the salary of a person with Mr. Wolf's credentials should be at or above the top of the current salary range for this position. He also explained that the allocation of implementation costs of the Shared Services Center is made pursuant to the affiliated interest agreement on file with the Commission. To change that allocation to produce a particular result in Indiana would require modifying the allocation methodologies in all states for Service Company costs, which may or may not result in less cost being allocated to Indiana. Further, he explained that there are significant qualitative benefits from Petitioner's participation in the Shared Services Initiatives related to improved treasury and financial accounting services. (Petitioner's Ex. JLC-R, pp. 10-11.)

Ms. Doron disputed the adjustment to the Corporate Office lease. She identified other functions which are soon to be relocated to the Corporate Office and utilize the space which would become available through the Shared Services Initiative. Ms. Doron also explained that Ms. Lynn has missed the point of Petitioner's Shared Services Initiative adjustments. Ms. Doron explained that the adjustments were presented merely for informational purposes. While preliminary estimates may currently be that the move to Shared Services will cause costs to increase, there are savings from this move which have not yet been identified and measured. While Petitioner disagrees that those savings include the items identified by Ms. Lynn, Petitioner anticipates there will be other savings and benefits which no party has identified. As a result, Ms. Doron explained that the effect of the move to Shared Services is not truly fixed, known and measurable at this time. Instead, this is a move that is still in transition. There may be pieces of the savings which can be identified and Petitioner has adjusted for those pieces except for the full effect of the allocation of the Shared Services Center operating cost to Indiana. Petitioner has limited that adjustment so as to keep the costs of providing these functions at the same level at which they would have been without the Shared Services Initiative. As a result, Petitioner's adjustments for Shared Services are essentially designed to explain to the parties and the Commission what is being proposed, but those adjustments are held to a net effect of zero. On cross-examination we heard that Ms. Lynn's proposed adjustments do not have a net effect of zero. Rather, Ms. Lynn's adjustments have the effect of reducing Petitioner's revenue requirement if the relief sought in Cause No. 42043 is granted. (Tr., p. E33.)

We find that Petitioner's proposed adjustments related to Shared Services should be accepted since they have a net effect of zero. We further find that an adjustment related to the Shared Services Initiative which has an effect other than zero should not be approved until after all of the savings and costs related to the Shared Services Initiative are fixed, known and measurable. Finally, the OUCC is concerned both in this case and in Cause No. 42043 that Petitioner may in a subsequent case seek recovery of the full impact of the move to the Shared Services Initiative. To the extent such recovery would cause costs to Indiana customers to increase, we remind the parties that we have the authority to disallow recovery of any item of expense to the extent we find the expense to be unnecessary or

excessive.

(v) Security Costs. After the Company had prefiled its case-in-chief but before the first evidentiary hearing, Petitioner requested that certain claimed security costs be added to the expenses considered in this rate case. Petitioner's witness Cole submitted supplemental direct testimony claiming that the amount of increased security operation and maintenance expenses which the Company is now incurring on an annual basis is $2,457,350. These expenses would be in addition to the level of total expenses and revenue requirements presented in Petitioner's case-in-chief as originally prefiled. He also stated that the Company will not make publicly available the details of what security measures are being taken or the breakdown of the annual amount because doing so would jeopardize the security program.

After the initial hearing, Petitioner and the OUCC agreed upon an arrangement by which the OUCC could review the substance of this proposed adjustment. Pursuant to a non-disclosure agreement, the Utility Consumer Counselor met with Mr. Cole and reviewed the details of the adjustment. After this meeting, Petitioner and the OUCC announced at the final evidentiary hearing that an agreement had been reached as to how to address security costs. That agreement was later reduced to writing in the form of a Stipulation and Settlement Agreement which was filed with the Commission on May 3, 2002.

The Stipulation provides that Indiana-American recover through rates in this case additional O&M expenses identified by Mr. Cole of $2,457,350 annually. The parties agreed that this amount represents only O&M expense and does not include any capital additions. Further, Indiana-American agreed that it would submit on a semi-annual basis under seal to this Commission a summary of the amounts it has incurred during the previous six months related to security costs. A copy of this information would also be made available prior thereto to the Utility Consumer Counselor and to the OUCC's Rates and Sewer/Water Director pursuant to nondisclosure agreements executed by each.

We note that the parties to this settlement submitted no detail or substantive evidence in support of the proposed increase in operation and maintenance expenses of $2,457,350, to be passed on to the ratepayers.

The Prehearing Conference Order issued by the Commission in this Cause on October 1, 2001 provided as follows:

> Settlements may also be presented to the Commission at either of the evidentiary hearings scheduled pursuant to Paragraph 7 or 11 hereof. In the event of settlement, the parties are directed to comply with the Commission's GAO 1995-4, and the provisions of 170 IAC 1-1.1-17(d). Order, p. 4.

The referenced Code provision permits parties "at any time prior to the issuance of the final order," to submit settlement proposals, or request a hearing for purposes of submitting a settlement

proposal. The Code provision also requires that "the settlement must be supported by probative evidence."

The Commission is mindful of and sensitive to the need for security of our utilities. However, this Commission takes very seriously its duty to base a charge against ratepayers only on adequate, probative evidence substantiating that charge. In the immediate matter, no such evidence has been presented, and for that reason the proposed settlement is denied.

The parties may, at their discretion, petition under this Cause Number for a hearing on the proposed security costs that they would seek to have absorbed by the ratepayers of this utility.

(vi) **Property Taxes.** Indiana-American's witness Cutshaw proposed a pro-forma adjustment to Indiana-American's test year property tax expenses to reflect the 2001 average tax rate times additions to Indiana-American's plant through July 31, 2001 (the rate base cutoff date). Mr. Cutshaw stated that these calculations are consistent with the methodology used by Indiana-American in previous rate cases. The OUCC did not contest Petitioner's adjustment for property taxes and in fact utilized Petitioner's calculation of the property taxes pertaining to the update of utility plant to actual as of July 31, 2001.

Crown Point witness Guerrettaz opposed the adjustment for property tax expense in Step One "due to regulatory changes in the way property taxes are assessed here in Indiana."

On rebuttal, Mr. Cutshaw explained that the Step One property tax adjustment was based upon the most recent assessment received from the State Board of Tax Commissioners and includes an assessment for additions in utility plant from December 31, 2000 until July 31, 2001, the cut-off date for rate base additions in this cause. Mr. Cutshaw also stated that this same method of calculating property tax expense has been approved by the Commission in Indiana-American's last three rate cases. Mr. Cutshaw cited the Commission's Order in Cause No. 39166, dated July 8, 1992, that found that it is appropriate to include property tax as an adjustment for all items found to be in rate base.

The Commission finds that the method used by Indiana-American in its case-in-chief is consistent with prior Commission Orders in Indiana-American's last three rate case proceedings.

(vii) **Chemical Expense.** Indiana-American's witness Tower proposed four pro-forma adjustments to Indiana-American's test year chemical expenses. On Petitioner's Exhibit JKT-2, Schedule 3, Petitioner proposed increasing the expenses due to an increase in caustic soda prices; a decrease in expenses due to changes in large customer consumption; an increase due to the water usage normalization adjustment discussed infra; and adjustments due to increased usage resulting from the Freeman Field and Prairieton acquisitions.

OUCC witness Lynn opposed the adjustment for caustic soda because she stated that it was her understanding that Petitioner's Seymour location would no longer use caustic soda; therefore,

while the price might increase, quantity would decline. Ms. Lynn calculated the chemical expenses using the 2002 bid awards, sorted by chemical, and multiplying them by the usage denoted on the bid awards, which resulted in a pro-forma decrease of $104,676.

On rebuttal, Ms. Tower explained that the 2002 bid award used by Ms. Lynn for her chemical expense calculation does not state reliable usage figures, but rather states figures which bidders were to use as guidelines. Ms. Tower stated that the prices in the Bid Award Sheet were reliable as the basis of a pro forma adjustment, but that the usage is not. Ms. Tower also disagreed with Ms. Lynn's assertion that the Seymour operation would not use caustic soda. Ms. Tower testified that Indiana-American uses caustic soda to treat both ground water and surface water.

We find that the method used by Indiana-American in its case-in-chief is more accurate in that it uses actual test year usage adjusted for known changes in large customer usage volumes, changes in residential usage due to the normalization adjustment approved herein, changes due to acquisitions and reflects the increase in the cost of caustic soda.

(viii) Waste Disposal Expense. The Gary Sanitary District learned that it had mistakenly undercharged Indiana-American for waste disposal services performed from 1996 through 1998. The Gary Sanitary District sent Indiana-American a bill in the amount of the undercharge. Because Indiana-American paid the bill during the test year, it included this amount as an expense in its rate calculation. As explained by Ms. Tower, the expense was proposed to be amortized over a three-year period. The OUCC and Intervenor proposed to eliminate this expense claiming its inclusion would result in retroactive ratemaking.

This expense is not properly labeled retroactive ratemaking. The prohibition of retroactive ratemaking is a result of the "cardinal principal of ratemaking that a utility may not set rates to recoup past losses . . . ." PSI Energy, Inc., Cause No. 39195 (IURC 2/26/92), citing Nadar v. Federal Communications Comm'n, 520 F.2d 182, 202 (D.C. Cir. 1975). Indiana-American is not attempting to set its rates to recoup a past loss. Rather, it is including an expense paid within the test year. As Ms. Tower recognized, not granting this adjustment would penalize Indiana-American for an error made on the part of the Gary Sanitary District.

The more appropriate label for this expense is nonrecurring. We cannot even properly assume that the expense will not likely repeat itself, because nothing prevents the Gary Sanitary District from making similar mistakes in the future. Thus, at best we can state the expense will occur infrequently. Our appropriate ratemaking treatment of such nonrecurring or infrequently occurring expenses incurred during the test year is to amortize them over a period of time, which is what Petitioner has proposed. See, e.g., Wayne County Rural Elec. Mem. Corp., Cause No. 38804 (IURC 1/17/90), p.4. We find that Petitioner's adjustment should be accepted and that Ms. Lynn's and Mr. Guerrettaz's adjustment should be rejected.

(ix) Well Cleaning Expense. Indiana-American's witness Tower proposed two pro-forma adjustments to Indiana-American's test year maintenance expenses. On Petitioner's

Exhibit JKT-2, Schedule 8, Petitioner proposed increasing the maintenance expenses due to well cleaning in the Wabash Operation and Southern Indiana Operation that were not completed during the test year. OUCC witness Lynn opposed the adjustments stating that having reviewed Petitioner's response to a data request, the well cleaning costs paid during the test year were representative of Petitioner's historic average.

On rebuttal, Ms. Tower explained that in the narrative included in the data response to which Ms. Lynn referred, Indiana-American explained that there were no historical charges for the Southern Indiana Operation due to the fact that their source of supply has changed from surface water to ground water, and that five of the Southern Indiana wells were to be cleaned before March 31, 2002 (twelve months following the end of the test year). Ms. Tower testified that the average cost to clean one well would be approximately $5,000, so the adjustment of $25,000 is reasonable and should be allowed. Ms. Tower also testified that the invoice for the cleaning of the Wabash well was received shortly following the end of the test year, and that the invoiced amount was $7,883.

We find that the proposed adjustment for the Southern Indiana well cleaning is reasonable, given that the wells will be cleaned within twelve months following the end of the test year and that the historical average would have included no cleanings for the Southern Indiana Operation since the wells were not in operation prior to 1999. As for the invoice paid following the close of the test year, the Commission finds that the well was cleaned during the test year and that the invoice was paid within twelve months following the test year, hence it is fixed, known and measurable, and should be allowed as a pro-forma adjustment. Petitioner should be allowed a pro-forma adjustment for maintenance expense of $33,883.

(x) **Purchased Power.** Mr. Guerrettaz proposed an adjustment to reduce the cost of test year purchased power based on Northern Indiana Public Service Company's ("NIPSCO") rate investigation pending in Cause No. 41746. Mr. Guerrettaz (p. 10) noted that "[a]t this point in time, the best information [the Intervenor has] is that a reduction in NIPSCO's rates are likely to occur in the amount of 15%, based on the Commission's Staff Report." Ms. Tower opposed Mr. Guerrettaz's adjustment because the Commission had not yet ruled in Cause No. 41746.

We reject the Intervenor's proposed adjustment to reduce Indiana-American's cost of test year power costs because it is neither fixed, known and measurable nor will it occur within twelve months of the close of the test year, which is the adjustment period. Mr. Guerrettaz acknowledges his adjustment is little more than speculation by indicating that the calculation is based on "the best information" currently available. (Id., p. 10.)

(xi) **General Office Expense.** Mr. Guerrettaz proposed to adjust general office expense so as to remove $330,899 which he labeled as "non-justified." He claimed that he could find no support for this amount in the workpapers or the exhibits filed in this cause.

On rebuttal, Ms. Tower identified where the support for this expense is contained in Petitioner's case-in-chief and workpapers. She explained that the amount Mr. Guerrettaz is

proposing to remove is the allocation of Corporate and Customer Service general office expense to the Northwest Operation. She then identified how the amount at issue traces directly through all of the schedules. The test year level of Corporate and Customer Service general office expense is $1,318,849. Based upon the number of customers, the Northwest Operation is allocated 25.15% of this amount. The total amount can be found on Petitioner's Exhibit JKT-1, page 5 of 10, line 17 in Column 2. Then in Column 3, the Corporate Allocation Column, the same amount is deducted from the operating statement of Corporate and Customer Service. It is deducted on this page so that it can be allocated and added to the operating statements of the various Company operations on other pages of Petitioner's Exhibit JKT-1. The amount of general office expense allocations is also verified by adding the amount shown on line 17 of Petitioner's Exhibit JKT-1 pages 2 through 4 and pages 6 through 10 of 10. Since this is simply an allocation using the customary allocation methodology and since the Company did not propose an adjustment to the test year level of this expense, Ms. Tower explained that no workpapers were submitted showing the allocation.

It is apparent that Mr. Guerrettaz simply was unable to identify the source for the number which he is proposing to adjust. Ms. Tower has explained where that source is and how it is allocated among the various operations. Because Mr. Guerrettaz does not challenge either the total amount of general office expense of $1,318,849 or the allocation methodology, the amount which is to be allocated to the Northwest Operation cannot be challenged as nonjustified. We therefore find that Mr. Guerrettaz's proposed adjustment should be rejected.

(xii) Rate Case Expense. Indiana-American originally sought a rate case expense adjustment of $339,000, to be amortized over thirty-six months resulting in a pro forma regulatory expense of $127,808. OUCC witness Lynn proposed modifying Indiana-American's pro-forma regulatory expense to $122,031 which includes a depreciation study cost of $14,808. The basis for Ms. Lynn's modification was her conclusion that "it appeared [Indiana-American] was requesting postage for customer notices twice." (Public's Ex. 1, p. 27). Ms. Lynn's conclusion came from her inquiry into $21,000 contained in miscellaneous expense for rate case expenses. Ms. Lynn testified that Indiana-American explained that this miscellaneous expense was an estimate based on actual costs associated with copying and binding testimony and postage to mail the customer notices during the last rate proceeding. Since Indiana-American already had a line item in its estimate for customer notices of $41,000, Ms. Lynn concluded Indiana-American was twice counting its expenses for postage to mail customer notices.

On rebuttal, Mr. Cutshaw updated the original estimate of rate case expense based upon the significant level of activity in this case. He also explained his basis for disagreement with Ms. Lynn's modification. Mr. Cutshaw testified that Indiana-American had underestimated the costs of direct mailing the second customer notice. (Petitioner's Ex. JLC-R, p. 23.) The second notice was sent so that all customers would receive the same level of notice. Mr. Cutshaw further explained that the miscellaneous expense line item included Mr. Hartnett's directly charged time and expense for participating as a witness in this case.

We find that Petitioner has adequately explained the items challenged by Ms. Lynn, but that

Petitioner's original estimates should be used. For these reasons, we find that Indiana-American's adjustment for rate case should be $339,000, resulting in pro forma regulatory expense of $127,808.

(xiii) Miscellaneous Expense. We begin our discussion of contested adjustments to miscellaneous expenses by reiterating our standard for reviewing de minimis expenses. As we noted in Indiana-American's last litigated rate case and its rate case before that in addressing proposed adjustments to reduce for expenses for safety programs:

> The resources expended to prove an expense item should never exceed the value of the expense item itself, and should always be congruous with the materiality of the expense item relative to the totality of expenses being considered.... We know that analyses to evaluate the effectiveness of these types of programs can be difficult to formulate and expensive to monitor, and are often more subjective than objective. For these reasons, the cost of demonstrating their worthiness and reasonableness for inclusion in rates can often exceed their absolute value, and their value relative to more significant items in the rate case. We are also aware that the magnitude of expenses for service and safety programs relative to total expenses for operation and maintenance are less than one percent of the total, and therefore immaterial.

(1997 Rate Order, pp. 58-59 and 1996 Rate Order, p. 18.) As will be apparent from our discussion, many of the disputed issues in this section will fall into this category.

a. Lobbying Expense. Ms. Gemmecke proposed to disallow all lobbying expenses, stating that our test for allowing recovery of lobbying expenses through rates is whether the lobbying produces a material benefit for the customers. Mr. Cutshaw and Ms. Doron opposed Ms. Gemmecke's disallowance and argued that the lobbying can produce a material benefit for the customers.

We have not previously approved the recovery of lobbying expenses. Petitioner pays a retainer to a local law firm for lobbying. They also pay membership dues to certain organizations wherein a portion of the dues also are attributable to lobbying the government. The Commission has ruled in Indiana-American's Cause Numbers 40103 and 40703, Boone County Rural Electric Membership Corp's Cause No. 39929, and Hoosier Energy Rural Electric Cooperative's Cause No. 37294 where-in the Commission's standard for inclusion or exclusion of lobbying expense was based upon proof of material benefit to the ratepayers. Petitioner's witness, Mr. James Cutshaw, stated in rebuttal testimony these expenses were used to allow investor owned utilities the opportunity to participate in the State Revolving Fund ("SRF") and also was instrumental in the repeal of federal income taxes on contributions in aid of construction ("CIAC"). Petitioner's inclusion of such expenses as part of its pro-forma expenses indicates a belief that such expense is fixed, known, and measurable and that similar benefits from lobbying will be incurred in the future. The Commission notes firstly that the repeal of the Federal taxability of CIAC was decided in 1996 and is not part of the current expenses of the Petitioner. Secondly, the Federal guidelines for the Safe Drinking Water Revolving Fund, whereby the State obtains funding for its SRF, has always allowed

investor owned utilities to participate since its inception. As of July 1, 1999 (before the beginning of the test year), private (investor owned) drinking water systems have been allowed to participate in the State Drinking Water State Revolving Fund. It is clear that the test year lobbying expenses, both direct and indirect through memberships, did not create any material benefit to the ratepayers. It is also clear that including such lobbying expenses in future rates does not meet the criteria of fixed, known, and measurable in that neither the issues nor the benefits to the ratepayers are determinable. Therefore, we disallow this claimed expense.

b. Capitalized Items. The OUCC proposed an adjustment for invoices Ms. Gemmecke testified should be capitalized rather than expensed. Ms. Gemmecke testified that about half of those invoices related to the lining of two wells and the remainder consist of instruments and construction materials of a financial magnitude that warrant capitalizing them. Indiana-American accepted some of these adjustments. Indiana-American acknowledged that two of the items ($4,203 and $3,395 for work on well 3a in Warsaw) were improperly expensed in the test year but were reclassified to utility plant after the test year but before the rate base cutoff. Accordingly, these items have already been included in the Company's presentation of original cost rate base. Indiana-American also acknowledged that $5,048 for pipe installed in well 2a in Warsaw during cleaning, $3,250 for installation of an 8" tie-in in Southern Indiana, and $2,029 for three hydrant meters in Northwest should have been capitalized. Mr. Cutshaw testified, and we find, that these items, totaling $10,327 should be removed from expense and should be reclassified as an increase to rate base. We have included this amount in our earlier finding on original cost rate base.

Mr. Cutshaw opposed the OUCC's proposal to capitalize the remaining expenses. (Petitioner's Ex. JLC-R, p. 31.) Mr. Cutshaw explained that the $2,730 to Ortman Drilling in Warsaw was to inspect and test well 3a and is an ongoing cost Indiana-American has always properly expensed. The $1,632 to Meriam Instrument in Northwest was for labeling tape and for a label-making machine that produces labels that are chemical and heat resistant. Mr. Cutshaw testified that not expensing these items would be analogous to capitalizing the cost of Xerox paper. Finally, the $6,978 and $4,092 to Wisner Controls in Northwest are for 15 replacement transmitters and indicators for the SCADA system across the system. Mr. Cutshaw testified that these transmitters and indicators must be replaced from time to time due to lightning strikes, electrical failures, etc. and would be used within a year. We find Mr. Cutshaw's explanation of these contested items to be satisfactory and therefore reject Ms. Gemmecke's proposed adjustment.

c. NAWC Dues. Ms. Gemmecke disagreed with Petitioner's proposed adjustment to increase the test year expenses for NAWC dues. Mr. Cutshaw explained there were three significant differences concerning the parties' calculation of NAWC dues. The first related to Ms. Gemmecke's exclusion of the lobbying portion of NAWC dues, a subject we have already addressed. The second related to Mr. Cutshaw's use of the more current formula for calculating dues. Dues are calculated by applying a formula to Petitioner's revenues, and so we find the more current formula should be used. Finally, Mr. Cutshaw testified that Ms. Gemmecke did not make any adjustment to annualize the dues for the Indiana chapter of the NAWC. According to Mr. Cutshaw's testimony, the most recent invoice was for $25,000 which requires an adjustment of $18,756 over the test year expense level. We find that Petitioner's calculation of and adjustment for

NAWC dues should be accepted and Ms. Gemmecke's adjustment should be rejected.

d. Employee Benefits. The OUCC proposed several adjustments to exclude expenses for employee benefits. OUCC's witness, Judy Gemmecke, has reduced miscellaneous expenses by $15,509 for Food and Beverages given to employees. The disallowance proposed by the OUCC consisted of food supplied to employees during, before, or after meetings, and coffee and tea provided to employees during work hours. Petitioner's witness James Cutshaw has objected to this reduction which he has segregated at $3,833 for food related to meetings and training, and the remaining being coffee and tea service which, he contends, should be allowed in rates as it is an industry practice. While these items may be part of a business practice that Indiana-American proscribes to, the Commission has previously deemed such expenses non-allowable for ratemaking purposes (Cause Number 37959 Fayette-Union County Rural Electric Membership Corporation, page 6; Cause Number 39314 Indiana Michigan Power Company, pages 122-127; Cause Number 39128 Indianapolis Water Company). The Commission recognizes the need for meetings and training sessions, however, food and beverages given to employees who already receive a living wage is excessive when it comes to setting rates. Petitioner has not shown how such purchases relate to providing water/sewer service, increase employee's knowledge regarding their job, nor avoid other costs which would have been borne if not for these particular purchases. The Commission finds the OUCC's adjustment to be correct and consistent with this Commission's previous orders.

e. Training and Meetings. Ms. Gemmecke proposes to eliminate $3,833 in expenses relating to Indiana-American meetings and training. Mr. Cutshaw, in opposing such adjustment, explained these expenses. The cost consists primarily of food purchased for meals during working lunches or training meetings. These meeting and training sessions are held at Indiana-American's Corporate Office in Greenwood, which avoids the expense of renting a facility. Employees from the operations come to the Corporate Office to participate in training on such topics as safety, water quality, and defensive driving, among others. Mr. Cutshaw testified that the lunches ordered are modest and of reasonable cost. We find that Mr. Cutshaw's explanation for these expenses is reasonable, especially given their de minimis impact. We find that they should be recovered through rates and therefore reject Ms. Gemmecke's adjustment.

f. Website Expenses. The OUCC proposed to exclude $7,249 related to Indiana-American's website. Mr. Cutshaw opposed excluding these expenses related to Indiana-American's website. He explained that the website included Indiana-American's tariffs, contact information, answers to service-related questions and water quality information. Mr. Cutshaw explained that these expenses provided a benefit to Indiana-American's customers and fulfill a regulatory obligation.

We agree with Indiana-American that expenses related to Indiana-American's website should not be excluded. Our General Administrative Order 1998-2 declares the Commission's policy that public utilities having a website, or with a parent corporation with a website, are to place certain information thereon for the benefit of the customers. Indiana-American's website promotes this

policy and serves its customers by providing a resource to answer questions and gather information on water quality information. We find that the OUCC's proposed adjustment to exclude $7,249 related to Indiana-American's website should be rejected.

g. **Community Related Expenses.** Ms. Gemmecke proposed to exclude $49,965 of expenses related to Indiana-American's membership in community organizations such as the Chamber of Commerce, Rotary, Economic Development Corporations, County Alliances, etc. and $6,097 in expenses related to community relations. Mr. Cutshaw, in opposing Ms. Gemmecke's proposed adjustment, testified that informing the communities Indiana-American serves about its operations, additions to plant in service, winter freeze protection, and other such matters are beneficial and should be recognized. According to Mr. Cutshaw, the communities Indiana-American serves are very interested in its construction projects and the impact they will have on water service and that these expenses help to inform the Communities of such projects. Furthermore, these costs have been allowed in previous Indiana-American rate cases. We reject Ms. Gemmeck's proposed adjustment for community related expenses and find that such expenses should be recovered from rates.

h. **Other Expenses.** The OUCC proposed omitting $2,788 in expenses relating to bill inserts informing Indiana-American customers about the Express Cheque program and $916 of operations related expenses. Mr. Cutshaw opposed these adjustments. He testified that informing customers about the Express Cheque program provided information that would help customers save money in postage and help Indiana-American save money in bank fees. Furthermore, the operations related expenses encompassed office supplies, safety supplies, hardware and an American flag that should be included in rates because they are normal costs of providing service to customers and are de minimus. We reject the OUCC's proposed adjustments relating to the Express Cheque program and the other operations related expenses and find such costs should be recovered through rates.

(xiv) **Non-Recurring Expenses.** The OUCC made a downward adjustment to account for certain items expenses by Petitioner in the test year which are unlikely to occur again. Most of the items listed on OUCC's schedule JIG-10 and summarized on OUCC witness Dana Lynn's schedule 6, adjustment 12, relate to Petitioner's move from their Camby Court location in Greenwood, to their current location on County Line Road in Greenwood, IN. Petitioner has not addressed this issue in its rebuttal nor during the hearing. The Commission agrees with the OUCC's adjustment for non-recurring expenses in the amount of $83,815.

(xv) **State Income Taxes**. Mr. Gassert identified that the OUCC's calculation of state income taxes is presented on D. Lynn, Schedule 7. The tax calculations on that schedule differ from Petitioner's. The difference relates to Petitioner's add back of $11.3 million of property taxes in calculating their state taxable income. I.C. 6-3-1-3.5 effective 1/1/99 eliminated the property tax add back for the state income tax calculation.

(xvi) **Amortization of Acquisition Adjustment.** As previously discussed, we will not include in operating expenses any amortization of the acquisition premiums relating to the acquisitions of Indiana Cities, Northwest, United or Cementville.

(xvii) **Depreciation Expense.** Depreciation expense shall be computed on the depreciable property included in rate base using the approved depreciation accrual rates.

(xviii) **Water Quality Concerns.** Public Field Hearings were conducted by the presiding officers in Gary, Indianapolis, Somerset and Jeffersonville, in order to obtain ratepayer input from a cross-section of the state rate base. During these hearings, the Commission received numerous complaints from customers about the quality of water supplies by Petitioner. For example, at the Somerset Hearing a senior citizen customer of Indiana American living on a fixed income, complained about the quality of water from the Company. She testified that she installed three (3) water heaters in 12 years, has a water softener and buys bottled water for her coffee maker. Lisa McCoy, a representative of Dalton Corporation, described her employer, formerly the largest customer of Indiana American in Warsaw, Indiana, and reported that, when the Petitioner changed its water source this caused the iron content to exceed EPA guidelines, and, upon receiving Dalton's complaint, Petitioner told Dalton that it would not deal with the iron issue.

Jerry B. Moser also complained that the water ruined his coffee maker and requires him to flush out the water heater. Carol Joy Matson complained that she replaced the toilets because of lime in spite of the filter system she installed. David Compton also complained about installing his fourth water heater, too much chlorine in water and inability to drink the water.

From elsewhere in the state, Phyllis J. Graves of West Lafayette testified via e-mail that the water smells and tastes strange and is not drinkable. Another West Lafayette customer buys bottled water to drink. She indicated that the water company told her after her complaint that they tested the water and nothing was wrong. She said she had lived in the same place for 30 years and the quality of water did not used to be like this.

Eric C. McVeigh from Portage, Indiana provided written comments stating that since his family moved to Portage, where Indiana American is the service provider, they found the public water of such poor quality that his family uses bottled water to drink and cook. Additionally, two members of his household use bottled water for brushing and rinsing their teeth because the tap water gives them mouth sores.

Mr. William Koon, a customer of Indiana American in Kokomo, stated that the Company does not provide good enough service to warrant a rate increase. Dick Persinger of Kokomo is concerned about the water quality and stated that he still buys water since they moved to Kokomo four years ago. Mr. Persinger also stated that he knows of no one who drinks the water. Susan Roberts from Winchester, Indiana testified that water quality has gone "down hill" since Indiana American bought the water system and that the water is now "yellow".

Connie Henderson of Gary stated that her water does not taste good. Booker Douglas, also from the Gary area has concerns about source water contaminations and the Company's continued use of lead pipe.

The Commission also received letters from officials and customers in Terre Haute, Mooresville, Noblesville, Shelbyville, and Franklin regarding the Company's responsiveness and reliability in those areas.

The widespread complaints from customers regarding water quality cannot be ignored. We note that some complainants submitted samples of water that demonstrated the unsatisfactory quality of water that some customers receive. Customers who pay for the cost of service including cost of improvements to the Utility's plant through rates should receive adequate water quality. The fact that numerous customers reported that they don't use the Company's water to drink and cook, having to install softeners or filters, and replacing water heaters, requires Indiana American to responsibly identify the problem and correct it in order to continue to merit the confidence of this Commission and its customers.

With regard to service in Northwest District, we note that Petitioner's witnesses testified that the system they acquired from Northwest Indiana was in generally good operating condition. The witnesses also testified that even the existing tunnel despite its old age is operating soundly and that the new tunnel project is to replace an aging structure that would have to be retiled in the near future. Thus, we fail to understand why the Company has not addressed the issue of water quality in this rate case, especially since this area is subject to the highest proposed rate increase in the entire Company system, with an increase of 50% proposed.

Indiana American's record with this Commission has demonstrated its responsiveness in stepping in and taking over troubled utilities to provide reliable and adequate water service to the citizens of those utilities. We are confident that the utility wants to maintain this record statewide.

Indiana American is directed to submit a report within 90 days of the date of this Order identifying the water quality problems in each area, their causes, the corrective measures to be taken, and a reasonable implementation time-table of these measures. The Company shall file a copy of this report to the OUCC. The Company shall, thereafter, file an annual status report on each implementation on or before the anniversary date of the original report.

14. **Net Operating Income At Present Rates.** Based upon the evidence and the determinations made above, we find that Petitioner's adjusted operating results under its present rates are as follows:

	Total Company
Operating Revenues	$118,736,711
O & M Expenses	44,918,070
Depreciation	19,128,388
Amortization	400,800
Other Taxes	13,938,661
State Income Tax	1,249,228
Federal Income Tax	8,600,417
Total Operating Expenses	88,235,564
Net Operating Income	$30,501,147

In summary, we find that with appropriate adjustments for ratemaking purposes, Petitioner's annual net operating income under its present rates for water service would be $30,501,147. We have previously found that the fair value of Indiana-America's utility property is $562,680,669. A return of $30,501,147 represents a rate of return of 5.42% on the fair value rate base. We find that this opportunity is insufficient to represent a reasonable return. We therefore find that Petitioner's present rates are unreasonable and confiscatory.

15. **Authorized Rate Increase (Step One).** On the basis of the evidence presented in these proceedings, we find that Petitioner should be authorized in Step One to increase its rates and charges to produce additional operating revenue of $4,712,484 or a 3.97% increase in its water revenue, resulting in total annual operating revenue of $123,449,194. This revenue is reasonably estimated to allow Petitioner the opportunity to earn net operating income of $33,368,323 as follows:

PROFORMA OPERATING INCOME STATEMENTS AT AUTHORIZED RATES – STEP 1

	Water Groups 1,2,3	Wabash	Total Sewer	Northwest	Mooresville
Operating Revenues	$82,458,493	$1,883,101	$ 284,737	$31,581,685	$,437,748
Operating Expenses					
O & M Expenses	$25,934,360	$ 861,853	$ 180,750	$14,826,260	$ 578,512
Depreciation	14,388,370	271,798	17,000	3,396,202	205,986
Amortization	337,688	3,051	1,521	47,032	2,319
Taxes Other Than Income	8,297,660	159,306	35,994	4,778,085	152,675
State Income Tax	1,056,949	18,394	1,763	295,670	18,250
Federal Income Tax	7,332,785	125,765	12,447	2,075,904	129,887
Total Operating Expenses					$
Net Operating Income	$25,110,681	$ 442,934	$ 35,262	$ 6,162,532	$ 350,119

	Warsaw	West Lafayette	Winchester	Total Company
Operating Revenues	$ 2,066,117	$2,983,270	$ 754,043	$123,449,194
Operating Expenses				
O & M Expenses	$ 936,504	$1,302,535	$ 329,599	$ 44,950,373
Depreciation	296,545	438,235	114,252	19,128,388
Amortization	2,633	5,231	1,325	400,800
Taxes Other Than Income	188,576	313,901	73,758	13,999,955
State Income Tax	21,835	35,831	8,384	1,457,076
Federal Income Tax	151,553	256,165	59,773	10,144,279
Total Operating Expenses				$ 90,080,871
Net Operating Income	$ 468,471	$ 631,372	$ 166,952	$ 33,368,323

The Commission finds that rates estimated to produce this level of revenues would be just and fair and should allow Petitioner the opportunity to earn a fair rate of return on the fair value of its property dedicated to providing water and sewer service to the public. These determinations reflect the effect of additional revenue on income taxes, the gross receipts tax, the IURC fee and uncollectible accounts consistent with the gross revenue conversion factors shown on Petitioner's Ex. JLC-1, Sch. 3, p. 1 and Public's Ex. 1, Sch. 1, p. 2.

16. **Implementation of Step One Rate Increase.** In the 1997 Rate Order, we approved the Petitioner's request (as modified by a settlement agreement mentioned below) to consolidate thirteen of its separate water rate schedules into four rate groups for general water service, and three groups each for public and private fire service in a phased approach toward single tariff pricing ("STP"). In addition, we approved Petitioner's proposal to retain two separate rate groups for sewer service but move the sewer rates closer to STP. Finally, we approved a settlement agreement to keep the Wabash Operation from being included in the STP rate groups for a specified period of time.

In our order dated July 1, 1999 approving a Stipulation and Settlement Agreement in Cause No. 41320, we noted that the rate design resulting from the increase accomplished a further move towards STP in two ways. First, the number of general water service groups was reduced from four to three. Second, each of the rate groups was moved closer to the STP rate before the balance of the increase was applied on an across-the-board basis. We also noted that the Wabash Operation rates continued to be separately derived consistent with the settlement agreement approved in the 1997 Rate Order. Finally, we noted that public fire protection increases were limited in order to mitigate the impact of moving communities to public fire protection surcharges as and to the extent municipalities elect to do so pursuant to Ind. Code § 8-1-2-103.

In the current case, Petitioner is proposing to make a third step towards STP by again moving the water and sewer rate groups closer together and by eliminating another of the general water service rate groups, as depicted below:

% of STP

Group	General Water Service	Sewer
1	120% to 115%	96% to 98% Muncie Sewer
2	101% to STP	110% to 106% Somerset Sewer
3	96% to STP	

Group	Private Fire Protection	Public Fire Protection
1	112% to 107%	120% to 115%
2	80% to 84%	104% to STP
3	61% to 64%	91% to 95%

Petitioner proposes as a result of these movements to eliminate General Water Service Group 3, moving Crawfordsville, Newburgh, and Shelbyville into Group 2, which is the STP Group. Since in this Order we have not approved the rates sought by Petitioner, and we have not allowed subsidies in the Northwest Water and Sewer, it would be inappropriate to rule on the proposed elimination of Group 3 of the General Water Service without allowing Petitioner to reexamine its proposal in light of the increase in operating revenues authorized by this Order.

Petitioner is directed to report to the Commission within 7 days of the date of this Order, whether it still seeks to eliminate Group 3. Petitioner should also file new tariffs reflecting the authorized increases.

Petitioner also proposed to bring the individually calculated public fire protection surcharge for Newburgh and Sullivan (approved in Cause Nos. 41536 and 41920) to the appropriate Group rates and to implement the surcharge by meter size for all customers in the respective operation instead of just for the customers within the Town/City limits, consistent with Petitioner's proposals in the above referenced cases. Since the filing of this case, orders have been issued in Cause Nos. 42056 and 42147 approving surcharges by meter size for Greenwood and New Albany. Consistent with Petitioner's proposals in those cases, the individually calculated surcharges should be brought to the appropriate Group rate and the surcharge by meter size should be charged to all customers in these operations.

Petitioner again proposed to limit the increase for public fire protection group rates to 6%, consistent with its last rate case, and described the development of the rates for the Freeman Field customers consistent with our order in Cause No. 41655.

Petitioner explained that the proposed rates for the operations in Wabash, Mooresville, Warsaw, West Lafayette, and Winchester were determined by increasing the current rates across-the-board based upon the required revenue increase calculated from their individual rate bases and operating income statements. No party opposed this proposal and we find it should be approved.

Finally, Mr. Cutshaw explained that proposed rates for the Northwest Operation were limited

to a 17.41% across-the-board increase based upon the additional revenue requirement due to growth in net original cost rate base and related expenses since Northwest's last rate case. He explained that Petitioner made this adjustment because it realized that its standard practice of allocating all Corporate and Customer Service Center costs on a per customer basis had shifted a substantial portion of these costs from other operations due to the fact that the Northwest Operation has more than 25% of the customer base. The difference between the revenues resulting from the use of the 17.41% and the increase calculated on Schedule 1 of Petitioner's Exhibit JLC-1 was included in the across-the-board increase applied to the General Water Service. As we have previously stated, (Para. 6, p. 4 herein), we approach single tariff pricing carefully on a case-by-case basis. In this case we are not persuaded by Petitioner's argument that Northwest's rates should be partially subsidized by allocating a portion of its revenue requirements to the Water Groups. Therefore, we don't limit the Northwest rates increase to 17.41%, as proposed.

With respect to the implementation of the Step One increase, the participating parties raised two concerns. First, Schererville took issue with the allocation of Corporate costs within the Northwest Operation on an across-the-board basis, thus requesting that the increase be implemented for the Northwest Operation in a fashion other than across-the-board. Second, Crown Point took issue with the exclusion of sewer customers from the allocation of Corporate costs.

Mr. Sommer, testified that Corporate costs should be allocated among the rate classes on a per-customer basis. He testified that Petitioner allocates its Corporate costs to its various operations on the basis of the number of customers, and that this allocation should be carried directly to the end customer. In Mr. Sommer's opinion, a cost of service study is not needed to perform the allocation in Mr. Sommer's requested fashion. He stated that there are seven resale customers in the Northwest Operation compared to 65,251 total customers, but those seven resale customers are allocated 10.73% of the Petitioner's Corporate costs. Under Mr. Sommer's proposal, each of these resale customers would pay the same percentage as a single-family residential customer.

Schererville witness Sue Haase performed the calculation and the resulting rate impact from Mr. Sommer's proposal. She calculated the percentage of the total Step One increase for the Northwest Operation before the impact of the limitation described by Mr. Cutshaw. Of the total increase before limitation, 41.25% was generated by revenue requirements specific to the Northwest Operation; the balance of 58.75% according to Ms. Haase was determined based solely on the number of customers. She then applied the 58.75% to the requested Northwest Operation increase (as limited per Mr. Cutshaw's methodology) to arrive at $2,732,890 which she claimed was being allocated on a per customer basis. She then multiplied this amount by the percentage of total customers in each rate class to determine the proposed allocation to sale-for-resale customers, such as Schererville.

On rebuttal, Mr. Cutshaw explained that the increase for the Northwest Operation was an across-the-board increase because no cost of service study had been conducted. Further, he testified that to adopt Schererville's proposal, one would have to assume that a large wholesale customer like Schererville causes the same Corporate cost as one residential customer, an assumption Mr. Cutshaw

claimed was unreasonable absent a cost of service study. He recounted the testimony of customers who spoke at the Gary Field Hearing, who believe that they are already paying too much in relationship to those who live in surrounding communities that are wholesale customers of Indiana-American.

To argue that Schererville causes Corporate costs identical to a single residential customer defies logic. For example, no single residential customer intervened in this case. Plainly, resale customers cause higher Corporate costs than residential customers. Moreover, we find that there is a basic error in Ms. Haase's calculation. As explained by Mr. Cutshaw, Petitioner has held the Northwest Operation increase to the level which is produced by the incremental rate base in the Northwest Operation. In other words, Petitioner has already limited the allocation of Corporate costs to the Northwest Operation. Ms. Haase assumed that Petitioner limited both Corporate costs and direct costs proportionately. Her proposal results in the allocation of essentially no Corporate costs to sale-for-resale customers. Under her analysis, $206,783 is allocable to the wholesale customers solely from the direct costs which she does not dispute can be allocated based upon percentage of revenues. After she performs her calculations, however, the total increase which she believes is allocable to resale customers is only $293 more. (Schererville Ex. PSH-2.) This is the amount of Corporate cost she seeks to allocate to resale customers, which we find to be inappropriate absent a cost of service study. The Commission finds that the Petitioner's proposal is the most reasonable presented, and Petitioner's proposed methodology of allocation of shared expenses is hereby approved.

Petitioner proposed that sewer customers, who are also water customers, not be allocated shared Corporate costs. Crown Point witness Mr. Guerrettaz testified that each customer should share in the Corporate allocation. Ms. Tower testified that the sewer customers in Muncie and Somerset are also water customers in their respective operations, and the allocation of additional Corporate costs to them would be a "double-allocation" for those customers. At the field hearing held in Somerset, the customers expressed several concerns. The Commission finds that the "double allocation" of Corporate costs, when the Petitioner did not make such a proposal, would not be in the public interest. Therefore, Petitioner's proposed exclusion of sewer customers from the allocation of shared Corporate costs is hereby approved.

Petitioner also proposed to subsidize certain rates by allocating a substantial amount of the revenue requirements sought for the sewer operations to the Water Groups. Mr. Cutshaw testified that with the few number of customers of sewer service and the investments the company made, the resulting sewer rate increase would be: "unacceptably high". Mr. Cutshaw concluded that mitigating rate impacts is one of the benefits of STP. Again, we reiterate our caution for STP. We disagree with Petitioner's proposal to subsidize sewer rates by water rates. These are two different and distinguished services, and do not pass our standard for comparability. However, we agree that the proposed rate increase would cause rate shock if it were implemented in one step. Therefore, we will phase-in the sewer rate increase in two steps but without subsidization.

17. **Step Two Rate Increase.** As explained previously, the Prehearing Conference Order authorized a three-step rate increase, with Step Two to reflect the Commission-determined cost of

capital to the cost of certain capital projects plus associated changes in income tax expense, depreciation expense, property tax expense, and other associated operating expense changes. However, reviewing this rate matter as a whole, and noting that the proposed Phase Three provided for a requested increase of less than one-tenth of one percent, we find that a two-step process is the more reasonable. Any trailing costs related to the Tunnel Project may be addressed as provided in that applicable Order.

As demonstrated in graphs below, a total sewer increase of 50.83% is authorized in two equal steps. The First step takes effect immediately and the Second Step to be implemented one year from the date of this Order. Only Northwest Operations and the Water Groups will have a Step Two rate increase for water service.

A. **Cost of Plant to be Reflected in Step Two.** There are three projects for which a Step Two increase is authorized by the terms of the Prehearing Conference Order: (1) the Tunnel Project; (2) if approved, the Newburgh Project; and (3) if approved, the Wabash Valley Project (collectively, the "Step Two Projects").

(i) **The Tunnel Project.** Mr. DeBoy testified that the Tunnel Project is the replacement of the existing water intake tunnel which supplies the Borman Park Treatment Plant (the "Borman Plant"). In 1997, Northwest conducted a comprehensive inspection of the existing original tunnel which had been constructed in 1908 and confirmed that the remaining service life of the tunnel might not extend beyond 2002 to 2004. This existing tunnel is the current source of water supply for one of the most populated areas of our State and so it was plain that something needed to be done to address the situation. As required by the Settlement Agreement in Cause No. 41484 wherein this Commission approved the merger of Northwest and Indiana-American, Petitioner filed the Petition in Cause No. 41692 seeking preapproval pursuant to Ind. Code § 8-1-2-23 of Petitioner's proposed plan to replace the existing tunnel.

Mr. DeBoy testified that seven different alternatives were considered and presented in Cause No. 41692:

1A	New tunnel in bedrock
1B	New tunnel constructed in bedrock inland, but trenched under the Lake
2A	New tunnel constructed in clay
2B	New tunnel constructed in clay inland, but trenched under the Lake
3	New tunnel constructed entirely in trench
4	Renovation of existing tunnel
5	Trench to U.S. Steel property, then tunnel in clay under the Lake

Alternative 1B was initially considered the preferred option, using a quantitative and qualitative screening process which was described in detail in that cause and summarized in this case. Alternative 1A had not yet been rejected at the time of our approval, however, so in Cause No.

41692 we approved both Alternatives 1A and 1B, with the final selection to be made after bids were received. Mr. DeBoy testified that bids were solicited on both alternatives and that Alternative 1A proved to be the lower cost alternative. The Tunnel Project is currently under construction and anticipated to be in service in April 2003. The current estimated cost is $48 million.

Mr. Guerrettaz proposed a capacity adjustment based upon his claim that a portion of the Tunnel Project will not be used and useful until a later time. He claims that the Tunnel Project will have a capacity of 100 million gallons per day ("MGD") and that Petitioner will only have treatment capacity of 78 MGD. In his opinion the full capacity of the Tunnel Project will not be needed until some time during the next 100 years. He therefore proposed to reduce the cost of the Tunnel Project to be included in rate base for purposes of Step Two rates by 20% of the cost estimates for the Tunnel Project. He arrived at this amount by rounding the treatment capacity to 80 MGD and subtracting that amount from the 100 MGD capacity of the Tunnel Project, leaving a difference of 20 MGD. He then divided 20 MGD by 100 MGD to arrive at his 20% capacity adjustment.

Mr. DeBoy had three objections to Mr. Guerrettaz's adjustment. First, he noted that we have already preapproved the capacity of the Tunnel Project to 100 MGD. Mr. DeBoy identified where in Cause No. 41692 he had testified the new tunnel would have a capacity of at least 100 million gallons per day. Second, he testified that Mr. Guerrettaz has conducted none of the analysis which is necessary to propose a capacity adjustment. Finally he testified that to restrict the capacity of the Tunnel Project to 80 MGD as proposed by Mr. Guerrettaz would have in fact resulted in a greater cost of the Tunnel Project. This is a very long shaft with portions in bedrock. The Tunnel Project is being completed with a boring machine. That boring machine cuts a hole which must be large enough not only for the machine itself but also for the workers and ventilation, power supply and other equipment that are necessary to construct a tunnel. He testified that the contractor would have used a machine to cut an 11½ foot diameter hole regardless of whether Indiana-American had requested a tunnel with capacity of 100 MGD or 80 MGD. As such, to restrict the capacity of the Tunnel Project to 80 MGD as Mr. Guerrettaz requests would have required the use of more concrete to shrink the size of the hole so as to allow less water. The result is that a tunnel limited to capacity of 80 MGD would have cost more to build than the current tunnel.

We find that there are several shortcomings to Mr. Guerrettaz's analysis. First, and perhaps most importantly, we have already approved the Tunnel Project to a capacity of at least 100 MGD. In our Order in Cause No. 41692, we explained that the context in which our preapproval had been sought was the Settlement Agreement we had approved in Cause No. 41484 wherein we had approved the merger of Indiana-American and Northwest. That Settlement Agreement which we had approved "required Petitioner to file a petition with the Commission by March 31, 2000, seeking Commission approval of the Tunnel Project. To the extent the Tunnel Project is approved by the Commission, the Settlement Agreement also permits Petitioner at its option in its next general rate case to include the Tunnel Project in its rate base through the use of a three step increase." Order, Cause No. 41692, p. 3. We then recited the testimony concerning the proposed size of the tunnel:

> Mr. DeBoy stated that the intake system would include a suction shaft near the Borman Plant. The tunnel segment from the suction shaft to the near shore shaft will be a minimum of 96 inches in diameter. There will be an intermediate access shaft, approximately halfway between the suction shaft and the near shore shaft. Assuming Alternative 1B is selected, the segment from the near shore shaft to the intake crib will be 96 inch diameter pipe, installed in a trench excavated at the bottom of the lake. The pipe material will likely be prestressed concrete cylinder, steel or ductile iron, depending upon the results of the contractor bids. The tunnel will have a capacity of at least 100 million gallons per day.

Order pp. 5-6. After reciting this evidence, we then proceeded to find that the proposed 100 MGD Tunnel Project should be approved:

> Here, persuasive and undisputed evidence has been submitted showing that the Existing Tunnel is nearing the end of its remaining service life and should be replaced, and that Petitioner's proposed Tunnel Project is the most reasonable solution. Accordingly, we find that the Tunnel Project and the expenditures associated therewith should be approved to the extent that they do not exceed the updated cost estimate in Petitioner's next rate case. Once the Tunnel Project is completed and placed in service, we find it should be included in Petitioner's rate base consistent with the terms of the Settlement Agreement.

Order pp. 7-8. Finally, we ordered: "Petitioner shall be and hereby is authorized to include the Tunnel Project in its rate base for ratemaking purposes after the Tunnel Project is placed in service and consistent with the terms of the Settlement Agreement." Order, p. 9. In sum, we find that Mr. Guerrettaz's proposed adjustment has already been rejected.

Even apart from the preapproval for the Tunnel Project, Mr. Guerrettaz has presented none of the evidence which we have stated is necessary to support a challenge of excess capacity. In the 1997 Rate Order we announced our standard for reviewing challenges of excess capacity:

> The OUCC cites no support for its approach to measuring the value of used and useful plant. To address the level of appropriate capacity, the Commission has outlined the factors that must be considered and addressed. They are as follows:
>
> (1) The prudence of the decision to construct the new plant;
>
> (2) The reasonableness of the demand forecasts;
>
> (3) Whether there were changed circumstances during the construction, necessitating a reevaluation of the decision to continue with construction;
>
> (4). The lead time to construct new facilities;
>
> (5) The necessity to provide adequate and reliable utility service;
>
> (6) The utility's need for a margin of safety or reserve;
>
> (7) The financial impact on the utility of a finding of excess capacity and the long-term effect on the ratepayers; and

(8) The risk that changes in demand projections will impact the utility's reserves and ability to serve its customers.

> Northern Ind. Pub. Serv. Co., Cause No. 37458, 67 PUR4th 396, 401-02 (PSCI 6/19/85). To this we will add another factor particularly important for water utilities – the utility's need to comply with the requirements of environmental agencies.
>
> The OUCC presented no evidence on any of these points which are central to an excess capacity challenge.

(1997 Rate Order, pp. 15-16.)

Mr. Guerrettaz's proposed adjustment has not met the standard as set out in the 1997 Rate Order. He has not claimed it was imprudent to build the Tunnel Project to 100 MGD, but has assumed that only a percentage of the new tunnel will be used currently. He has then made the same assumption we rejected that the cost of plant varies directly and proportionally with capacity by reducing the cost of the Tunnel Project by 20%. It is perhaps for these reasons that he did not consider the limits on construction pointed out by Mr. DeBoy which would have caused the Tunnel Project to be more expensive had its capacity been limited to 80 MGD.

We therefore find that Mr. Guerrettaz's proposed capacity adjustment in Step Two should be rejected. The cost of the Tunnel Project should therefore be included in the calculation of Step Two rates as provided in the Prehearing Conference Order. The cost to be included shall be the actual cost not to exceed $48 million.

(ii) **The Newburgh Project.** Mr. DeBoy testified that the Newburgh Project will make available an additional 2.0 MGD of supply for the Newburgh Operation. It will include construction of 2.0 MGD groundwater supply and construction of a 2.0 MGD iron and manganese removal plant. He testified that it is needed because demand routinely approaches and exceeds the current capacity. The estimated cost of the Newburgh Project is $4.68 million. No party submitted any evidence in opposition to the Newburgh Project. We find the Newburgh Project is reasonably necessary and that Petitioner's cost estimates are reasonable. We therefore find that to the extent it has been placed in service on or before the in-service date of the Tunnel Project, Petitioner may include the cost of capital, income tax expense, depreciation expense, property taxes and other operating expenses related to the Newburgh Project in Step Two rates. The cost to be included shall be the actual cost not to exceed $4.68 million.

(iii) **The Wabash Valley Project.** Mr. DeBoy explained that the Wabash Valley Project provides for residuals management and improvements to existing chemical feed and storage arrangements at the water treatment plant in Terre Haute. The improvements are needed in order to comply with the new National Pollution Discharge Elimination System ("NPDES") permit. The anticipated cost is $3.78 million. No party submitted any evidence in opposition to the Wabash

Valley Project. We find that the Wabash Valley Project is reasonably necessary and that Petitioner's cost estimates are reasonable. We therefore find that to the extent it has been placed in service on or before the in-service date of the Tunnel Project, Petitioner may include the cost of capital, income tax expense, depreciation expense, property taxes, and other operating expenses related to the Wabash Valley Project in Step Two rates. The cost to be included shall be the actual cost not to exceed $3.78 million.

B. Operating Expense Adjustments. The only dispute related to operating expenses associated with the Step Two Projects relates to property taxes. As explained previously, Mr. Guerrettaz testified that there was uncertainty regarding how property taxes would be computed due to the potential for new legislation during the 2002 Session of the Indiana General Assembly. He therefore believed that an adjustment for property taxes is not fixed, known and measurable and should not be approved.

Mr. Cutshaw explained that any changes to the property tax calculation are not anticipated to reduce property taxes for utility property. On cross-examination, he explained that House Bill 1004 contains a provision specifically providing that taxes for public utilities would not be reduced regardless of the impacts for other types of property and taxpayers. (Tr., p. H6.) He also explained that there is no question there will be property taxes assessed for the Step Two Projects. Finally, he testified that the Prehearing Conference Order already authorizes property taxes to be included in the adjustment, even though all of the uncertainty surrounding property tax reform existed at the time we issued the Prehearing Conference Order. He testified that by Mr. Guerrettaz's adjustment, Intervenor Crown Point is not accepting the record as it stood at the time Crown Point intervened, in contradiction to what Crown Point committed to do as a condition to its intervention. On cross-examination, Mr. Cutshaw agreed that the Company would be willing to accept a true-up to actual property tax expense for the Step Two Projects based upon potential property tax reform between now and the implementation of Step Two Rates, so long as the true-up can work both ways. In other words, if property tax reform reduces property tax expense on the Step Two Projects from what is anticipated, the Step Two Rates will be reduced accordingly; on the other hand, if property tax reform increases property tax expense from what is presently anticipated, the Step Two Rates will be increased accordingly. (Tr., pp. H7-8.) We find this true-up proposal to be reasonable.

We find that we have already considered the appropriateness of including property tax expenses on the Step Two Projects at the time we issued the Prehearing Conference Order. In that Order we authorized the inclusion of property taxes on the Step Two Projects as a part of the Step Two rate increase. At the time we issued that Order, the uncertainty concerning how property taxes will be mechanically computed as a result of property tax reform existed to the same extent it exists today. We know that property taxes will be assessed on the Step Two Projects and that Petitioner's method of calculating these expenses is the current best estimate of what those expenses will be. We therefore find that Mr. Guerrettaz's proposed exclusion of property tax expense from the Step Two Rate Increase should be rejected.

We therefore find that the Step Two Rate Increase should also include the operating expense

adjustments, including property taxes, proposed by Petitioner, subject to the true-up formula described above.

C. **Implementation of Step Two Increase.** Petitioner proposed to implement the Step Two rate increase by increasing the Northwest Operation rates to a level which is approximately the single tariff rate for residential customers. The balance is proposed to be spread across-the-board among all other operations except for the Wabash Operation and the former United Operations for which single tariff authority has not yet been approved. We have determined that we will not allow this mechanism in this proceeding.

Based on the estimated costs of the Step Two Projects approved above, Petitioner is authorized to increase its rates after completion of the Tunnel Project by up to $7,528,905 per year or 6.10% from the Step One Rates, depending upon the certified actual costs of the projects, as follows: The fair value finding for Step Two adjusts the fair value finding in Step One to include inflation up to the second quarter of 2003 plus net plant additions. Thus, the Step Two fair value rate base is $639,949,626. Using the previous found fair value rate of return of 5.93% equates to a required NOI of $37,949,064.

ORIGINAL COST RATE BASE - STEP 2

	Water Groups 1,2,3	Total Sewer	Northwest	Unchanged All Other	Total Company
Utility plant in service	$445,037,169	$ 700,375	$190,985,412	$43,185,128	$679,908,084
Capitalized tank painting	286,949			453,525	740,474
Deferred depreciation	2,315,273	3,813	62,507	-	2,381,593
Post-in-Service AFUDC	4,040,445	5,331	209,573		4,255,349
Accumulated depreciation & amortization					
- utility plant	(87,756,984)	(95,403)	(38,140,524)	(9,478,962)	(135,471,873)
- tank painting	(249,390)	-	-	(183,765)	(433,155)
- deferred depreciation	(408,011)	(301)	(4,672)	-	(412,984)
- post-in-service AFUDC	(663,169)	(430)	(13,777)	-	(677,376)
Net utility plant	$362,602,282	$ 613,385	$153,098,519	$33,975,926	$550,290,112
Contributions in aid of construction	(35,940,103)	(105,857)	(17,386,477)	(7,039,605)	(60,472,042)
Customer advances for construction	(17,004,126)	(48,821)	(12,669,762)	(2,250,119)	(31,972,828)
Somerset capacity adjustment	(27,621)	(64,896)	-	-	(92,517)
Acquisition adjustment	1,106,855	30,855	(63,756)	-	1,073,954
Materials and supplies	1,057,107	1,289	551,210	196,515	1,806,121
Total Original Cost Rate Base	$311,794,394	$ 425,955	$123,529,734	$24,882,717	$460,632,800

PROFORMA OPERATNG INCOME STATEMENTS AT PROPOSED RATES - STEP 2

	Water Groups 1,2,3	Wabash	Total Sewer	Northwest	Mooresville
Operating Revenues	$ 83,565,320	$1,883,101	$ 284,737	$38,003,762	$ 1,437,748
Operating Expenses					
O & M Expenses	$ 25,941,947	$ 861,853	$ 180,750	$14,870,283	$ 578,512
Depreciation	14,388,370	271,798	17,000	3,396,202	205,986
Amortization	337,688	3,051	1,521	47,032	2,319
Taxes Other Than Income	8,312,056	159,306	35,994	4,861,616	152,675
State Income Tax	1,105,767	18,394	1,763	578,924	18,250
Federal Income Tax	7,695,394	125,765	12,447	4,179,849	129,887
Total Operating Expenses	$ 57,781,222	$1,440,167	$ 249,475	$27,933,906	$ 1,087,629
Net Operating Income	$ 25,784,098	$ 442,934	$ 35,262	$10,069,856	$ 350,119

	Warsaw	West Lafayette	Winchester	Total Company
Operating Revenues	$ 2,066,117	$2,983,270	$ 754,043	$130,978,098
Operating Expenses				
O & M Expenses	$ 936,504	$1,302,535	$ 329,599	$ 45,001,983
Depreciation	296,545	438,235	114,252	19,128,388
Amortization	2,633	5,231	1,325	400,800
Taxes Other Than Income	188,576	313,901	73,758	14,097,882
State Income Tax	21,835	35,831	8,384	1,789,148
Federal Income Tax	151,553	256,165	59,773	12,610,833
Total Operating Expenses			$	
Net Operating Income	$ 468,471	$ 631,372	$ 166,952	$ 37,949,064

The following graph shows the percentage of change by service area:

PERCENTAGE CHANGE FOR EACH STEP BY SERVICE AREA

	Step 1	Step 2
Water Groups 1, 2, 3	-0.73%	1.35%
Wabash	14.94%	0.00%
Total Sewer[4]	50.83%	0.00%
Northwest	18.11%	20.20%
Mooresville	7.57%	0.00%
Warsaw	-2.24%	0.00%
West Lafayette	-3.08%	0.00%
Winchester	24.02%	0.00%
Total Company	3.97%	6.10%

IT IS THEREFORE ORDERED BY THE INDIANA UTILITY REGULATORY COMMISSION that:

1. Petitioner is hereby authorized to adjust and increase its rates and charges for water and sewer utility service for Step One in accordance with the findings herein which rates and charges

4 Due to the potential effect of "rate shock", the total sewer increases will be spread over a two year period, the second step to take place one year from the date of this Order.

shall be designed to produce total annual operating revenues of $123,449,194 which, after annual operating expenses of $90,080,081, are expected to result in annual net operating income of $33,368,323. Petitioner is further authorized to adjust and increase its rates and charges for water and sewer utility service for Step Two in accordance with the findings herein which rates and charges shall be designed to produce total annual operating revenues of $130,978,098, which, after annual operating expenses of $93,029,034, are expected to result in annual net operating income of $37,949,064.

2. Petitioner shall file new schedules of rates and charges with the Gas/Water/Sewer Division of the Commission on the basis set forth in Finding Nos. 16 and 17 herein. Such new schedules of rates and charges shall be effective upon filing and approval by the Gas/Water/Sewer Division and shall apply to water and sewer usage from and after the date of approval.

3. The Settlement Agreement regarding security costs between Petitioner and the OUCC is denied.

4. Petitioner is authorized to adjust and increase its rates and charges for water and sewer utility service upon placement in service of the Tunnel Project in accordance with Finding No. 15 and the terms of the Prehearing Conference Order, which rates are designed to produce further additional annual operating revenues of not more than $7,528,905, or a 6.10% increase from Step One Rates, which amount shall be subject to downward adjustment to the extent certified actual costs of the Step Two Projects are less than Petitioner's estimates herein as provided in the Prehearing Conference Order.

5. This Order shall be effective on and after the date of its approval.

MCCARTY, HADLEY, RIPLEY CONCUR; ZIEGNER ABSENT:
APPROVED: NOV 06 2002

I hereby certify that the above is a true and correct copy of the Order as approved.

Nancy E. Manley

Nancy E. Manley
Secretary to the Commission

ORIGINAL

Taken

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF INDIANA-AMERICAN WATER COMPANY, INC. FOR AUTHORITY TO INCREASE ITS RATES AND CHARGES FOR WATER AND SEWER SERVICE, FOR APPROVAL OF NEW SCHEDULES OF RATES AND CHARGES APPLICABLE THERETO, AND FOR APPROVAL OF NEW DEPRECIATION ACCRUAL RATES	)	CAUSE NO. 40703 APPROVED: DEC 11 1997

BY THE COMMISSION:
Scott R. Jones, Assistant Chief Administrative Law Judge

On December 6, 1996, Indiana-American Water Company, Inc. ("Petitioner", "Indiana-American" or "Company") filed its petition in this Cause for authority to adjust its rates and charges for water and sewer service, for approval of new schedules of rates and charges applicable thereto and for approval of new depreciation accrual rates. In the Petition, Petitioner provided notice of its intent to file in accordance with the minimum standard filing requirements ("MSFRs") contained in Appendix A to General Administrative Order ("GAO") 1995-2 approved on September 28, 1995.

Pursuant to the Prehearing Conference on February 18, 1997, the Prehearing Conference Order dated March 5, 1997, and notice of hearing given as provided by law, proof of which was incorporated into the record by reference and placed in the official files of the Commission, public hearings in this Cause were held on May 6-7, 1997, and July 22-23, and 28-29, 1997, in Indianapolis, Indiana. The Prehearing Conference Order provided that Petitioner may proceed under the MSFRs approved by GAO 1995-1 and that this proceeding should be subject to the Policy for the Completion of Cases adopted by GAO 1995-1. At the hearings, evidence offered by Petitioner and the Office of Utility Consumer Counselor (the "OUCC") was received and admitted. On June 6, 1997, the City of Wabash ("Wabash") filed a Petition to Intervene which was subsequently granted. At the hearing on July 29, Petitioner and Wabash offered as a Joint Exhibit a Settlement Agreement regarding rates in Petitioner's Wabash operation which shall be discussed later.

Pursuant to Ind. Code § 8-1-2-61(b), a public field hearing was held on May 29, 1997, in Muncie, the largest municipality in Petitioner's service area, at which time members of the public were afforded the opportunity to make statements to the Commission. A public field hearing was also held in the City of Greenwood on August 18, 1997.

Having considered the evidence and being duly advised, the Commission now finds:

1. Notice and Jurisdiction. Due, legal and timely notice of the filing of the Petition in this Cause was given and published by Petitioner as required by law. Proper and timely notice was given by Petitioner to its customers summarizing the nature and extent of the proposed changes in its rates and charges for water and sewer service. Due, legal and timely notices of the Prehearing Conference and the public hearings in this Cause were given and published as required by law. Petitioner is a "public utility" within the meaning of that term in Ind. Code § 8-1-2-1 and is subject to the jurisdiction of the Commission in the manner and to the extent provided by the laws of the State of Indiana. This Commission has jurisdiction over Petitioner and the subject matter of this proceeding.

2. Petitioner's Characteristics. Petitioner is an Indiana corporation engaged in the business of rendering water utility service to approximately 165,000 customers in fifteen counties in the State of Indiana. Petitioner's corporate office is located in the City of Greenwood. Petitioner provides water service by means of water utility plant, property, equipment and related facilities owned, leased, operated, managed and controlled by it, which are used and useful for the convenience of the public in the production, treatment, transmission, distribution and sale of water for residential, commercial, industrial, sale for resale and public authority purposes. Petitioner also provides public and private fire service. In addition, Petitioner provides sewer utility service in Somerset, Indiana and in Delaware County in or near Muncie, Indiana.

3. Relief Requested. Petitioner's existing basic rates (with the exception of sewer service provided in or near Muncie) were approved by the Commission's Order in Cause No. 40103 dated

May 30, 1996 (the "1996 Rate Order"). Petitioner's rates for sewer service in its Muncie operation were approved by the Commission's Order dated October 2, 1996, in Cause No. 40442, which authorized Indiana-America's acquisition of the sewer utility system of Farmington Utilities, Inc. In this proceeding, Petitioner requests an overall rate increase of 13.38%.

Petitioner asserts that a rate increase is necessary due to significant capital expenditures for additions and improvements to its facilities and increases in its cost of capital. Petitioner's witness John E. Eckart, Petitioner's President, testified that the original cost of Petitioner's utility plant in service has increased by about $51.9 million since Petitioner's last rate case. (Petitioner's Ex. JEE, p. 10.) The proposed increase varies by local operation. Petitioner requests a consolidation of and reduction in the number of separately determined rates for the areas served by Petitioner in a phased move toward single tariff pricing. As required by prior orders of the Commission, Petitioner also submitted a depreciation study and requested approval of new depreciation rates based on the results of that study. Mr. Eckart testified that almost $8 million of Petitioner's proposed rate increase of $8.2 million was attributable to capital expenditures since the last rate case and the proposed depreciation rates resulting from the study which Petitioner was required to submit. (Id., p.12.) Mr. Eckart stated that operation and maintenance ("O&M") expense level had declined since the last rate case. (Id., pp. 12-13.)

4. Test Year. Pursuant to the Prehearing Conference Order, the test year to be used for determining Petitioner's actual and pro forma operating revenues, expenses and operating income under present and proposed rates is the twelve months ended August 31, 1996. The financial data for such a test year, when adjusted for changes as provided in the Prehearing Conference Order, fairly represents the annual operations of Petitioner. We conclude, therefore, that such test year, as adjusted, is a proper basis for fixing new rates for Petitioner and testing the effect thereof.

5. Fair Value Rate Base. The Prehearing Conference Order provided that the general rate base cutoff should reflect used and useful property at the end of the test year and may be updated as provided in Section 5(3)(B) of Appendix A to GAO 1995-2. Petitioner may also adjust for "major projects" as permitted by

Section 5(4) of Appendix A to GAO 1995-2. Petitioner identified in its petition three such major projects: (a) the Crawfordsville System Improvements Project; (b) the Johnson County System Improvements Project; and (c) the Noblesville System Improvements Project.

There was no difference in the evidence of Petitioner and the OUCC as to the quantification of the original cost of Petitioner's water and sewer utility property except: 1) the treatment of the acquisition adjustment resulting from the take-over of Indiana Cities Water Corporation by Indiana-American; 2) the disallowance of a portion of the cost of the three system improvement projects which the OUCC alleged were "excess capacity"; 3) the disallowance by the OUCC of the Seymour building; 4) the disallowance by the OUCC of the Kokomo Wells; 5) the disallowance by the OUCC of the North Port Tank's inclusion in rate base; and 6) the capitalization of Comprehensive Planning Studies by the Petitioner and the amortization of such studies by the OUCC.

A. <u>Acquisition Adjustment</u>. On August 31, 1993, Indiana-American acquired the common stock of ICWC Holdings Inc. which owned all of the common stock of Indiana Cities Water Corporation ("Indiana Cities"). The acquisition was made pursuant to Commission approvals granted by the Order in Cause No. 39669 dated July 7, 1993. ICWC Holdings was subsequently dissolved, making Indiana Cities a direct subsidiary of Indiana-American. The purchase price paid for the common stock was $37,344,610. After adjustment upward for acquisition related costs and downward for certain investment tax credit benefits, Indiana-American's total investment to acquire Indiana Cities was $37,072,008. The book value of Indiana Cities common equity at the acquisition date was $19,659,999. The difference between the investment to acquire Indiana Cities and the book value of Indiana Cities was $17,412,009. (1996 Rate Order, p. 3.) This amount (the "1993 acquisition adjustment") is termed an "acquisition adjustment" and is booked on Indiana-American's balance sheet as an asset. In Cause No. 40103, Indiana-American proposed to amortize the 1993 acquisition adjustment over a period of forty years commencing with the rate order in that proceeding. A major issue in that proceeding was (a) whether Indiana-American should be allowed to earn a return on the full amount of the investment made to acquire Indiana Cities by including the acquisition adjustment in Indiana-American's rate base upon which the Company is allowed to earn a

return and (b) whether Indiana-American should be allowed to recover its investment over time by including the annual amortization of the acquisition adjustment as an allowable expense for ratemaking purposes, i.e. by amortizing it as an "above-the-line" expense.

In the 1996 Rate Order, we made the following findings pertinent to the acquisition adjustment:

(a) Cost savings resulting from the combination of Indiana Cities and Indiana-American are a natural result of a sensible combination of utility systems and are natural synergies (p. 7);

(b) The acquisition transaction was reasonable (p. 7);

(c) Authorities stating that "unusual benefits" are required before acquisition adjustments are included in expense or rate base have been premised upon original cost ratemaking methodologies (p. 8);

(d) Fair value jurisdictions, on the other hand, do recognize the difference between market and book values of utility systems and would allow the purchaser to earn a return on the fair purchase price of the acquired utility (p. 10);

(e) When the fair value of the acquisition is included in the fair value rate base, the acquisition adjustment should not be amortized as an above-the-line expense (absent certain specified exceptions) (p. 10);

(f) The purchase of Indiana Cites was made at arm's length (p. 13);

(g) The purchase price was reasonable and is appropriate to be included in Indiana-American's fair value rate base (p. 15);

(h) The 1993 acquisition adjustment should not be amortized as an above-the-line expense (p. 15);

(i) Indiana-American is authorized to recognize in rates 100% of its investment made to acquire Indiana Cities through its fair value rate base (p. 15);

(j) Indiana-American should be compensated for its investment in the Indiana Cities properties through informed fair value ratemaking which fully recognizes their fair value in the fair value rate base determination (p. 49); and

(k) The return of the amount invested should occur when the investment is ultimately traded or liquidated (p. 10).

In summary, in the 1996 Rate Order, we did not include the acquisition adjustment in Indiana-American's original cost rate base but we did find that 100% of the investment should be recognized in its fair value rate base. Rates were established using the fair value rate base. The authorized net operating income level included a fair value increment of $1,112,482 above the amount which would have been derived by multiplying the cost of capital times the original cost rate base (excluding the 1993 acquisition adjustment). (Petitioner's Ex. JEE, p. 35.) We further found the acquisition adjustment should not be amortized as an above-the-line expense.

At the hearing on its case-in-chief, Indiana-American presented the prefiled testimony of Mr. Eckart regarding the 1993 acquisition adjustment. Mr. Eckart's testimony discussed the treatment afforded the 1993 acquisition adjustment in the 1996 Rate Order summarized above. Mr. Eckart also discussed the alternative of including the acquisition adjustment in the original cost rate base. The OUCC objected to the latter testimony on the ground that Indiana-American was precluded from relitigating this issue by the doctrine of administrative res judicata, relying upon Watson Rural Water Co. v. Indiana Cities Water Corp., 540 N.E.2d 131, 135 (Ind. Ct. App. 1989) and South Bend Federation of Teachers v. National Education Ass'n, 389 N.E.2d 23 (Ind. Ct. App. 1979). (Tr., p. B-12.) Counsel for the OUCC argued that Indiana-American was "putting forth its proposal for the same exact treatment of its acquisition adjustment that was rejected by this Commission in just the last proceeding." (Tr., pp. B-11 -- B-12.) The OUCC's counsel

further asserted: "The Commission has ruled and shouldn't be put through the burden of having to deal with it again." (Tr., p. B-19.) Counsel for Indiana-American argued that administrative res judicata did not apply to the ratemaking function of the Commission (which is the exercise of a legislative power), particularly questions of policy and noted that neither Watson nor South Bend Federation were rate cases. Indiana-American cited Indiana Gas Co. v. Office of Utility Consumer Counselor, 610 N.E.2d 868 (Ind. Ct. App. 1993), in support of its position. The presiding officers sustained the OUCC's objection and struck the portion of Mr. Eckart's testimony dealing with the original cost alternative. This ruling was sustained on appeal to the full Commission.

B. Original Cost Rate Base.

1. The "Major Projects" and Alleged Excess Capacity. Petitioner presented evidence of the net original cost of its plant as of November 30, 1996, adjusted for the major projects. The OUCC used the same general rate base valuation date. A general rate base update after the end of the test year is permitted provided it is made as of a date prior to the hearing on Petitioner's case-in-chief. We accept and will utilize November 30, 1996, as the general rate base valuation date. Petitioner adjusted its rate base to reflect identified major projects in Crawfordsville, Johnson County, and Noblesville. Consistent with the MSFRs, Petitioner included in its case-in-chief estimates of the costs of the projects.

i. Petitioner's Evidence on the Major Projects. Alan J. DeBoy, Petitioner's Director of Engineering, testified in Petitioner's case-in-chief regarding the major projects. Mr. DeBoy testified that the Crawfordsville System Improvements Project includes the construction of an operations and treatment center and four additional ground water wells. These facilities include chemical storage and feed equipment, aeration facilities, pressure filters, a ground storage tank, and other appurtenant facilities. He testified that these facilities will replace the existing Whitlock Wellfield and Treatment Facility. He testified without the new facilities, the Crawfordsville System would have inadequate capacity to meet demand. He estimated the total cost of the Crawfordsville System Improvement Project to be $7,490,000. (Petitioner's Ex. AJD, pp. 4-6.)

Mr. DeBoy testified that the Johnson County System Improvement Project consists of construction of (1) the Sugar Creek Water Treatment Plant and a new well near Franklin, (2) the Meridian Parke Booster Station and elevated storage tank near Greenwood, and (3) a new well along with improvements to the Marlin Water Treatment Plant and Orme Pump Station near Greenwood. He testified that a number of system components in Johnson County (including source of supply, treatment, transmission, and storage) lack adequate capacity to satisfy existing and projected demands. He stated the improvements in Johnson County are another phase in an overall plan to address this concern. He estimated the total cost of the Johnson County System Improvements Project to be $11,918,000. (Id. pp. 6-11.)

The Noblesville System Improvements Project includes two wells at the White River North Wellfield and a new treatment facility along Edith Avenue just south of 206th Street. Mr. DeBoy testified that the Noblesville improvements are necessary because the existing facilities can no longer satisfy the increased system demands. He estimated the total cost of the Noblesville System Improvements Project to be $6,677,000. (Id. pp. 12-13.)

Mr. DeBoy also testified regarding economies of scale resulting from the major projects. He testified that Petitioner enjoyed substantial cost savings from pursuing all three of the treatment plants included in the major projects at one time with a common size of filters. This approach permitted bulk purchases resulting in substantial savings. He testified that pursuing all three plants at once with uniform designs reduced the costs at least $1,171,281 from what would have been required if each project had been sized and bid separately. (Id., pp. 13-14 and Petitioner's Ex. AJD-2.)

On cross-examination and redirect examination, Mr. DeBoy explained further the urgency of the three major projects. He testified that prior to completion of the major projects, the historic maximum day demands in Crawfordsville, Johnson County and Noblesville already exceeded the current firm or reliable delivery capacity. (Tr., pp. E-85, E-92.) He stated that for short periods, Petitioner could sustain these capacity deficits by using its storage water and by overpumping the wells. These practices jeopardize fire protection, lessen water quality, and shorten the life of the existing facilities. For instance, he testified that

there have been a number of occasions when Greenwood has operated with essentially no water storage for fire protection. (Tr., p. E-71.) He also testified that prior to the major projects, firm capacity (the capacity with the largest unit out of service) was inadequate in all three of these operations. He noted this is not merely a hypothetical concern because Crawfordsville in the Summer of 1996 had an electrical problem with one of its pumps. As a result, many of Petitioner's industrial customers were requested to limit consumption and they had to send their workers home early. (Tr., p. E-91.) In response to cross-examination questioning, Mr. DeBoy explained that it was not possible to phase in these major projects in stages because Petitioner needs all three major components of water utility operation: source of supply, treatment, and transmission and distribution. (Tr., E-93.) He noted that to the extent phasing was possible, earlier phases had already been completed in Johnson County. With respect to the remaining work, however, phasing was not an option because all the work was necessary to deliver more water to the customers. (Tr., p. E-72.)

At the final hearing James L. Cutshaw, Petitioner's Director of Rates and Revenues, submitted evidence of the actual costs of the major projects and confirmed that they were all in service as of the time of the final hearing. The estimates and actual costs of the portions of the projects placed in service after November 30, 1996, were as follows:

Project	Estimate	Actual Cost	Rate Case Final
Crawfordsville	$ 5,909,000	$ 5,919,453	$ 5,909,000
Johnson County	11,685,000	11,657,448	11,657,448
Noblesville	5,298,000	5,796,019	5,298,000
TOTAL	$22,892,000	$23,372,920	$22,864,448

(Petitioner's Ex. JLC-S-2.) The MSFRs permit the inclusion in rate base of the smaller of the estimate included in Petitioner's case-in-chief and the actual cost. The estimates and actual costs identified above are smaller than the estimates provided by Mr. DeBoy because Mr. DeBoy's estimates represent the total projects

including portions that were already in service and included in utility plant in service as of November 30, 1996, the rate base valuation date. Mr. Cutshaw's estimates represent the amounts for which a major project rate base adjustment was sought, i.e., the portions placed in service after November 30, 1996.

Based upon the evidence, we find that (a) each of the major projects was identified in the Petition, (b) Petitioner provided the estimated cost of each major project in its case-in-chief, (c) the cost of each major project exceeds one percent of Petitioner's proposed original cost rate base, (d) Petitioner filed monthly investment updates following its case-in-chief regarding the projects, and (e) each of the major projects was in service as of the final hearing. Accordingly, we find that Petitioner has satisfied the requirements of the MSFRs for including the major projects in its rate base.

ii. The OUCC's Position on Alleged Excess Capacity. The OUCC proposed adjustments to each of the major projects for alleged excess capacity in Crawfordsville, Johnson County, and Noblesville. The OUCC's excess capacity adjustments got smaller as the case progressed because increasing water deliveries in the period between its original prefiling and the final hearing repeatedly exceeded the maximum capacity which the OUCC previously had said was required. For example, the progression of the OUCC's proposed disallowance of the Johnson County project (stated as a percentage of the post-November 30, 1996 costs) was as follows:

Date	Source	Proposed Excess Capacity Percentage
June 10, 1997	Original Prefiling	66.2%
July 21, 1997	Second Set of Corrections	52.2%
July 23, 1997	Corrections Made on the Stand	36.0%

OUCC witness Richard J. Michal testified that with the major project, the combined total capacity of the wells, treatment facilities, and pumping facilities in Crawfordsville is 4.44 MGD.

Mr. Michal alleged that Indiana-American's projected most likely maximum day demand in the year 2000 is 3.42 MGD, and that the 5-year historical maximum day demand was 3.5 MGD in 1994. Witness Michal concluded that the difference between total system capacity and the 5-year historical maximum day demand is "excess." Mr. Michal testified that $5.874 million of the major project is wells, supply mains, pumping structures and equipment, and water treatment structures and equipment. He originally proposed excluding 21.17% of this amount from Petitioner's rate base. Due to an error in his calculations, he prefiled corrections to his testimony, raising the adjustment to 26.86%. He arrived at this percentage by subtracting the historical maximum day demand from "total capacity" (Public's Ex. 4, p. 5, line 15) and then dividing by the capacity of the major project. Mr. Michal's proposal would have reduced the original cost rate base in Crawfordsville by $1,577,756. On cross-examination and redirect examination, Mr. Michal again updated his excess capacity adjustment to account for a new maximum day demand in Crawfordsville of 3.58 MGD that occurred on July 20, 1997, which was less than three weeks after the major project was placed in service. With this new information, Mr. Michael stated that his proposed excess capacity adjustment in Crawfordsville would be approximately 26%. (Tr., pp. RJM2-7 -- RJM2-8.) After the hearing, the OUCC filed revised schedules showing a final excess capacity adjustment for Crawfordsville of 26.2857%. This would result in excluding $1,544,023 from the original cost rate base.

OUCC witness Nicole M.P. Adams proposed an adjustment for alleged excess capacity in Johnson County. She testified that she analyzed both Franklin and Greenwood separately to see if each community had sufficient operating capacity to support its customer base. She testified that the Franklin operation has a total capacity of 7.5 MGD. Before filing corrections to her testimony, she compared this to the 1996 maximum day of 3.8 MGD and to the alleged projected most likely maximum day for the year 2000 of 4.3 MGD. In Greenwood, Ms. Adams alleged that Indiana-American has total capacity of 13.1 MGD, which she originally compared to the projected most likely maximum day demand in the year 2000 of 11.4 MGD. She then summed the capacities in Greenwood and Franklin and subtracted the sum of the projected most likely combined maximum day demands in the year 2000 to arrive at an excess capacity adjustment of 66.2%. She divided the difference by the combined capacity of the major project. As Mr. Michal had done, she

multiplied this percentage by the cost of various components of the major project to reduce rate base by $5,187,432.

Twice Ms. Adams made corrections to her prefiled testimony regarding Johnson County based upon new maximum days. On July 21, 1997, she filed corrections raising her calculation of used and useful capacity in Johnson County to 16.7 MGD based upon a new maximum day the previous weekend. Then two days later at the hearing, she raised her calculation of used and useful capacity to 17.9 MGD to equal a new maximum day occurring on July 20, 1997. The impact of her two changes was to reduce her Johnson County excess capacity adjustment from 66.2% to 52.2% and then again to 36.0%. The final change would result in a reduction to the original cost rate base of $2,820,960. (Tr., pp. NMPA-8 -- NMPA-10.)

Ms. Adams also sponsored the OUCC's Noblesville capacity adjustments. She alleged the total capacity of the Noblesville operations is 5.5 MGD. Ms. Adams conceded that additional plant was needed in the Noblesville operation. She compared the total system capacity with the new plant to the projected most likely maximum day demand in the year 2000 of 3.5 MGD. Using the same method she used for Johnson County, she arrived at a total capacity adjustment for Noblesville of 66.7% in her testimony as originally prefiled. As in Johnson County and like Mr. Michal she multiplied this percentage by the cost of certain components of the major project to reduce the original cost rate base by $2,970,818. Due to a new maximum day in Noblesville the weekend before the hearing, she revised her excess capacity adjustment to 62%. This would result in a reduction to the original cost rate base of $2,761,480. On cross-examination, Ms. Adams admitted that her Noblesville excess capacity adjustment would need to be changed again because she had not used the most recent projected most likely maximum day demand in the 1996 Noblesville Comprehensive Planning Study for the year 2000, which is 4.06 MGD. (Tr., pp. NMPA-39 -- NMPA-40; Petitioner's Ex. GAN-R-7.)

The position of OUCC witnesses Adams and Michal is that the major projects are not fully used and useful because Petitioner is not projecting a maximum day demand during the estimated life of the rates to be approved in this case that will fully tap 100% of the capacities of the systems in Crawfordsville, Johnson County, and Noblesville. (Tr., pp. RJM-16, Tr., pp. NMPA-31 -- NMPA-33.)

Since they believed the year 2000 represented the end of the expected life of these rates, they compared capacity to the projected year 2000 most likely maximum day demand or the 5-year historical maximum day demand, whichever is higher. (Tr., pp. RJM-24 -- RJM-25; Tr., pp. NMPA-14 -- NMPA-15.)

iii. Petitioner's Rebuttal. Petitioner's rebuttal witness on capacity issues was Gary A. Naumick, the Director of Planning for the American Water Works Service Company, Inc. As such, Mr. Naumick oversees capacity planning for all American Water Works operating companies, including Petitioner. He is in charge of the development of demand projections for the water systems and development of a 15-year capital improvement program for each operation to ensure the continued provision of safe, adequate and reliable water service to the public. Mr. Naumick testified that the OUCC witnesses committed six errors that affect all of their capacity adjustments:

1. They ignored the requirements of the Indiana Department of Environmental Management ("IDEM") to comply with the Recommended Standards for Water Works, commonly known as the 10-State Standards. The 10-State Standards routinely require water facilities to be designed so that projected maximum day demands can be satisfied with the largest unit (e.g., well, pump, filter, etc.) out of service.

2. The OUCC witnesses failed to consider an appropriate margin of safety. Mr. Naumick testified that a 10% margin of safety between supply and demand at all times is recommended and appropriate. He pointed out that immediately after a major capacity addition, the margin would exceed this percentage but the margin will decline over time until the next projected addition. He also noted that a margin of safety is essential because both Petitioner and the OUCC have used projected maximum day demands under a "most likely" scenario from Petitioner's comprehensive planning studies. Although these may be the expected maximum days, higher demands are reasonably possible. In fact, Petitioner in the studies also projects future demands under two additional scenarios -- high and low. In addition, some of the studies are more recent than others, and so some of the demand projections may be somewhat dated. (Tr., pp. NMPA-39 -- NMPA-40.)

3. The OUCC witnesses failed to account for in-plant usage needs such as filter backwashing and water sampling. This is water that is needed from the plants' capacity but which is not included in the projected maximum day demand figures.

4. The OUCC witnesses failed to consider a reasonable planning horizon. Mr. Naumick said Petitioner's use of a 13-year horizon was reasonable, and that, indeed, horizons of fifteen to thirty years are appropriate.

5. The OUCC witnesses failed to consider the substantial cost savings and economies of scale resulting from pursuing all major projects at one time with uniform filter sizes. Mr. Naumick testified that because of these cost savings, Petitioner was able to add more capacity for less money, thus providing a healthier margin of safety and allowing the deferral of the next capacity addition.

6. The OUCC witnesses displayed a lack of understanding of construction costs by assuming that the amount of capacity and the cost of capacity are directly and proportionally related. Mr. Naumick testified that most items only have a marginal difference in cost as capacity increases and many have virtually no difference in cost. He stated that the cost differential for a 5 MGD plant versus a 4 MGD plant would be on the order of 5% but would provide a capacity increase of 25%. Since Indiana-American was able to achieve the cost savings using uniform designs, the OUCC's proposed downsizing and customizing would likely have caused cost increases. He also testified the OUCC witnesses erred in applying their capacity adjustments to the newest plant, which represents the most efficient plant on Petitioner's system. (Petitioner's Ex. GAN-R , pp. 4-18.)

After correcting these numerous errors of the OUCC witnesses, Mr. Naumick testified that there is appropriate capacity in Crawfordsville, Johnson County and Noblesville. Considering one filter out of service in Crawfordsville, treatment capacity will satisfy the most likely projected maximum day in the year 2010 with a margin of safety of only 6%. (Id., p. 19.) In Noblesville, treatment capacity considering one filter out of service will satisfy the most likely projected maximum day in the year 2010 with a margin of safety of only 9.8%. (Id., pp. 20-22.) In Johnson County, considering one filter out of service, additional

facilities must be added before the year 2005 in order to satisfy the most likely projected 2010 maximum day demand. (Id., pp. 22-30.) The OUCC had no cross-examination questions for Mr. Naumick.

iv. Commission Finding on Excess Capacity. The OUCC made no challenge as to the prudence of the major projects. They did not challenge Petitioner's decision to add capacity. They did not specifically contend that Petitioner should have built smaller or otherwise different facilities. They did not contend that Petitioner spent too much for the facilities that were added. Having failed to raise any of these critical issues, the OUCC has formulated a new proposed test to measure excess capacity: the value of plant can only be included in rate base as and to the extent the plant's rated maximum capacity is projected to satisfy a maximum day demand during the life of the rates in this case. Ms. Adams justified the OUCC's proposal by claiming that the use of an historical test year somehow forbids the inclusion in rate base of plant that is designed to satisfy demand into the future. (Tr., p. NMPA-31) The OUCC then assumed that the cost of plant varies directly with the amount of its capacity. This assumption is unsupported, and was refuted by Mr. Naumick's uncontroverted testimony that cost and capacity do not bear a direct proportional relationship. See, also Laclede Gas Light Co. v. Public Serv. Comm'n of Missouri, 8 F. Supp. 806, 6 PUR(NS) 10, 13-14 (W.D.Mo. 1934).

The OUCC cites no support for its simplistic and mechanical approach to measuring the value of used and useful plant. To address the level of appropriate capacity, the Commission has outlined the factors that must be considered and addressed. They are as follows:

(1) The prudence of the decision to construct the new plant;

(2) The reasonableness of the demand forecasts;

(3) Whether there were changed circumstances during construction necessitating a reevaluation of the decision to continue with construction;

(4) The lead time to construct new facilities;

(5) The necessity to provide adequate and reliable utility service;

(6) The utility's need for a margin of safety or reserve;

(7) The financial impact on the utility of a finding of excess capacity and the long-term effect on the ratepayers; and

(8) The risk that changes in demand projections will impact the utility's reserves and ability to serve its customers.

Northern Ind. Pub. Serv. Co., Cause No. 37458, 67 PUR4th 396, 401-02 (PSCI 6/19/85). To this we will add another factor particularly important for water utilities -- the utility's need to comply with the requirements of environmental agencies.

The OUCC presented no evidence on any of these points which are central to an excess capacity challenge.

The OUCC's approach would not assure adequate planning for the provision of safe and reliable utility service. By using only a 2-1/2 year planning horizon (the year 2000), by providing no margin of safety, and by only planning for Indiana-American's projected maximum day demand under a "most likely" scenario, the OUCC's proposal would place customers at risk of demand exceeding capacity. Indeed, this is not merely an academic problem. Less than three weeks after the major projects went into service, Johnson County experienced a dramatic increase in its maximum day demand coming very close to its projected 2005 maximum day demand and exceeding the projected 2000 maximum day demand and the capacity originally recommended by Ms. Adams (before her two corrections) by over 2.1 MGD. Crawfordsville and Noblesville also experienced new maximum days during this period that would have exceeded the OUCC's recommended capacity. The point is that with the OUCC's planning horizon, none of the major projects would have been sufficient to satisfy demand even for three weeks.

Ms. Adams contended that Petitioner could institute water usage restrictions and that there would be no safety concern from bypassing the filters altogether and pumping partially filtered water into the system so that the plant could be operated in excess

of its rated capacity. In response to cross-examination questioning regarding what Petitioner would have done three weeks after the Johnson County improvements were placed in service, when her proposed capacity would have been inadequate to meet the needs of the customers, Ms. Adams testified:

> They're going to -- one, they're going to ask their customers to conserve water, just like [Indianapolis Water Co.] and Utility Center up in northern Indiana which have been experiencing the same dry weather that people in Johnson County and Noblesville are experiencing. You're going to ask people to back off, conserve. Secondly, they're going to look at how they can max -- use the maximum production capacity of their plant. And if they go farther, considering that these are groundwater wells, they may have to bypass a filter or they may have to bypass the filter process or a portion of that filtering process. They still will **probably -- likely** be able to maintain some standards if they're filtering a good portion of their water. . . .

(Tr., pp. NMPA-19 -- NMPA-20, emphasis added.) Mr. Michal also suggested this as an option. (Tr., pp. RJM-26 -- RJM-27.) Petitioner's Vice President of Operations, Eric W. Thornburg reminded us during his direct testimony as a part of Indiana-American's case-in-chief and again on cross-examination during rebuttal testimony that in Indiana-American's last rate case, customers in Newburgh complained about constituents in the water in the Newburgh operation. (Tr., pp. I-19 -- I-20.) These complaints were attributable in large part to treating water in excess of the rated capacity of the filters, just as Ms. Adams and Mr. Michal are now proposing Indiana-American do with the major projects. Mr. Thornburg also presented evidence showing the dramatic decline in customer complaints in Newburgh since reducing production at the treatment plant to its rated capacity and increasing wholesale water purchases from the City of Evansville. (Petitioner's Ex. EWT, pp. 13-18.)

Ms. Adams admitted on cross-examination that distributing partially treated water would cause higher iron and manganese levels that could turn clothes red when they are washed. She admitted that the United States Environmental Protection Agency has promulgated Secondary Maximum Contaminant Levels for iron and

manganese. (Tr., p. NMPA-21.) She admitted that her suggested solution would cause customers to complain. Ms. Adams testified:

> Q Ms. Adams, what do you think the reaction of the public whom you are here representing today would have been if three weeks after an expensive new treatment plant went into service, Indiana-American would have imposed usage restrictions?
>
> A. Honestly I think that there would be some concern projected as there would be in the year 2005 when the plant is only like, what, five, seven, eight years old.

(Tr., pp. NMPA-20.) Mr. Michal was not certain of the operational impact of running water through a filter in excess of its rated design capacity. (Tr., pp. RJM-27 -- RJM-28.)

The public ingests water. We must be wary of creating incentives or disincentives through rates that would jeopardize the public health and safety. We simply cannot condone the OUCC's approach, which we find would lead to inferior water quality and customer complaints (in addition to inadequate fire protection) so soon after costly capacity additions. Ms. Adams understated the reaction to the impact of the OUCC's approach -- there would be outrage, not just "some concern," both on the part of the customers and this Commission if only three weeks after building new treatment plants, Petitioner experienced a demand that exceeded the capacity of the affected systems.

Utilities need to pursue cost effective additions of capacity reflective of reasonable planning horizons. Even the OUCC's chief engineer, Daniel J. Kuester, when testifying about Petitioner's comprehensive planning studies (a subject discussed hereafter), stated that a two year planning horizon (which is implicit in the position of OUCC witnesses Adams and Michal) would be unreasonable. He testified that a longer planning horizon such as Indiana-American's fifteen year horizon should be used in adding and sizing capacity. Mr. Kuester explained:

> In any operation, you need to know what's coming up in terms of long-term decisions. <u>It makes no sense to have a two-year planning horizon</u> that shows that you're going to need a storage tank that you locate at a certain crossroads only to

> find out if you had moved that out a half a mile, it would serve for five years or would be more useful, more efficiently useful. The longer term gives you long-term indicators; it doesn't give you today's operations to work with, but it tells you what's coming down the pike.

(Tr., p. DJK-10, emphasis added.) Mr. Kuester's hypothetical may have been a storage tank but we find the same principle should hold true for all capacity additions. It makes no sense to use a two year planning horizon if a longer horizon shows the need for a different plant that would last longer and be more useful.

The OUCC has tacitly suggested that the utility is free to proceed to make the prudent larger investment today; however, the OUCC believes the larger investment should still not be included in rate base until demand grows. Mr. Michal testified it should be the utility's risk to design a plant for the longer planning horizon. (Tr., p. RJM-28) The OUCC has suggested that even when IDEM requires a plant to be a certain size before a construction permit will be issued, the plant should not be included in rate base if it fails the OUCC's test. This position ignores our statutory obligation to authorize a fair return on the fair value of Petitioner's plant. If the plant was prudently built and is in service, we are commanded to include the full fair value in rate base, not just the portion of the plant that will be exhausted by demand during these rates. No utility can be expected to invest in plant that is not includible in rate base. Other government agencies including IDEM impose costs on doing business as a water utility. These are legitimate costs that we cannot ignore. We could no more disallow federal income tax expense than we could ignore the cost of investing in a plant required to meet IDEM requirements.

We find that Petitioner's major projects in Johnson County, Crawfordsville, and Noblesville reflected on Petitioner's books were in service as of the final evidentiary hearing, are actually devoted to providing water service and are therefore necessary and used and useful in providing water utility service to the public. The OUCC's proposed excess capacity adjustments are rejected.

2. Seymour Office Building. OUCC witness Michal proposed a rate base adjustment for Petitioner's Seymour office building. Mr. Michal contended the office is no longer open to the public and

houses only two employees. Mr. Michal also testified that Petitioner is in the process of selling this building and consolidating the functions of this office in the distribution garage.

Petitioner's witness Thornburg opposed the removal of this building from rate base. He testified that the building was in service as of November 30, 1996, the general rate base valuation date. He testified it was even in service as of the evidentiary hearing on Petitioner's case-in-chief. Mr. Thornburg also disputed Mr. Michal's characterization of the use of the building. He stated the office is a very small store front building that at its highest level only housed five employees. The office has always been open to the public; Petitioner simply no longer accepts payments over the counter at this location. (Petitioner's Ex. EWT-R, pp. 2-5.)

On cross-examination, Mr. Michal admitted the office building was in service as of the rate base valuation date. (Tr., p. RJM-41.) He also admitted the building was in rate base and therefore found to be in service and used and useful in Petitioner's last rate case. (Tr., p. RJM-42.) We find Mr. Michal's adjustment should be rejected. We are unpersuaded that as of the rate base valuation date the use of this building had materially changed from the time of Petitioner's last rate case. Although this office may not be a rate base item in future cases, it should be included in this case.

The OUCC also proposed to eliminate the expenses associated with this building. Since we here reject the rate base adjustment, we also reject the expense adjustment. Petitioner is entitled to recover its expenses associated with plant included in rate base. See, Northwest Ind. Water Co., Cause No. 40467 (IURC 3/26/97).

3. Kokomo Wells. Mr. Michal proposed to remove three wells in the Kokomo operation from rate base. These wells discharge into the Wildcat Creek reservoir. Mr. Michal testified the water from these wells flows the length of the reservoir over the spillway into Wildcat Creek toward the treatment plant. Mr. Michal testified that although it is possible some of the water flows into the plant and eventually to the public, he believes the wells are not used and useful.

Petitioner's witness DeBoy testified that Mr. Michal did not understand the impact these three wells have on the source of supply. He testified that these wells are used to maintain the reservoir level to assure adequate safe yield of the source of supply during winter low flow conditions and summer droughts. He stated that in 1996, the air temperature reached minus 14 degrees Fahrenheit. Without these wells the risk of the loss of this source of supply from extensive freezing would be substantial. He also stated that Indiana-American has conducted a source of supply study in Kokomo, the results of which reveal that without these wells, the Kokomo source of supply would be insufficient to meet demand conditions during a severe drought. He also testified the wells have been found to be used and useful in numerous prior rate cases. He testified that Mr. Michal's statement that only a small amount of the water reaches the plant was not correct. (Petitioner's Ex. AJD-R, pp. 1-4; Petitioner's Ex. AJD-R-1 and 2.)

The evidence establishes that the wells contribute to assuring the adequacy of Wildcat Creek as a source of supply. We find the wells to be in service and used and useful. Therefore, they should be included in Petitioner's rate base. Likewise, we reject the OUCC's proposal to exclude expenses associated with the wells.

4. Comprehensive Planning Studies. Petitioner capitalizes the costs of its comprehensive planning studies ("CPS") to utility plant in service (Account 303.99). In Petitioner's case-in-chief, Petitioner's witness DeBoy described its CPS process. As part of the CPS, Petitioner projects the needs of each of its operations over a fifteen year planning horizon. This includes projecting demands and identifying improvements necessary to meet future demands and anticipated environmental regulatory requirements. The CPS is then used to develop a ten-year construction budget.

OUCC witness Kuester opposed the capitalization of CPS costs and instead recommended that the costs be amortized over a five year period and recovered as operating and maintenance expense. He had no dispute with the prudence of conducting a CPS or with the use of a fifteen year planning horizon. Indeed, he commended Petitioner's CPS process. He did express "concerns" about the cost of some CPSs that are not reflected in this rate case. Since these costs are not yet in issue, we make no findings about them.

Petitioner's witness Cutshaw opposed Mr. Kuester's expense/amortization proposal. He testified that the CPS is capitalized and depreciated over a five year period. He testified that the Company's treatment of CPS costs is consistent with the treatment previously approved in orders for both Indiana-American and Indiana Cities. (Petitioner's Ex. JLC-R, pp. 20-22.)

The only difference between the Petitioner's proposal and the OUCC's proposal is whether the Petitioner can earn a return on the unamortized or undepreciated CPS costs during the five year period over which the cost is depreciated or amortized. On cross-examination, Mr. Kuester admitted that a CPS makes Petitioner's existing and future plant more efficient. (Tr., p. DJK-10.) He also agreed a CPS can help a utility extend the useful life of plant. (Tr., p. DJK-11.) He also admitted that if the Commission does not authorize capitalization of CPS costs, the utility will not recover the time value of money associated with its CPS expenditures. There was no showing that Petitioner's treatment of CPS costs is contrary to generally accepted accounting principles. In fact, Mr. Kuester stated he was not offering an opinion on whether CPS costs meet the accounting definition of an asset. (Tr., pp. DJK-9--DJK-10.)

We find that Mr. Kuester's proposal should be rejected and that Petitioner's capitalized CPS costs should be included in its rate base. We further find that CPS costs represent a part of the cost of bringing Petitioner's property to its present state of efficiency, which is a component of the rate base pursuant to Ind. Code § 8-1-2-6. See, L.S. Ayres & Co. v. Indianapolis Power & Light Co., 169 Ind. App. 652, 687-89, 351 N.E.2d 814, 837-38 (1976).

5. North Port Tank. The OUCC opposed the inclusion in Petitioner's rate base of the North Port Tank in the Southern Indiana operation because Mr. Michal disputed whether this tank will be useful. Pursuant to corrections filed before the final hearing, Mr. DeBoy agreed the tank should not be included in rate base, but not for the reasons cited by Mr. Michal. Mr. DeBoy testified that the tank, though substantially complete, was not in service as of the rate base valuation date. For this reason, we find the tank should be excluded from rate base in this proceeding.

6. GAC Filter Media. Petitioner recently began using granular activated carbon ("GAC") filter media in its Muncie, Seymour and Richmond operations. OUCC witness Michal stated that although it does not affect the rate base in this case because the GAC filter media was not installed until the Spring of 1997, he recommended the use of powdered activated carbon and potassium permanganate on a "as needed basis" instead of GAC filter media. Mr. Michal contended his recommendation would be less expensive. (Public's Ex. 4, pp. 12-14.) Petitioner's witness Eric W. Thornburg testified that Mr. Michal's recommendation was without merit because GAC filter media was necessary to provide a continuous barrier against herbicides and pesticides. (Petitioner's Ex. EWT-R, pp. 5-6.) Since this issue does not affect the rate base in this case, we will make no finding about it at this time.

7. Conclusion On Original Cost. The evidence establishes and we find that Petitioner's water and sewer utility properties reflected on its books as being in service at November 30, 1996, as adjusted for the Major Projects, are actually devoted to providing water and sewer utility service and are necessary therefore. The Commission finds such properties are well maintained and in good operating condition; reasonably necessary for the efficient and reliable maintenance of service; operated in an efficient and economical manner; and used and useful in providing water utility service to the public. Based on the evidence and our previous findings, the Commission finds that the original cost of Petitioner's water and sewer utility property used and useful for the convenience of the public, excluding the 1993 acquisition adjustment, is $221,628,031 computed as follows:

ORIGINAL COST RATE BASE

	Crawfordsville	Johnson County	Southern Indiana	Kokomo	Muncie Sewer	Muncie Water
Utility plant in service	$13,414,354	$48,607,535	$34,075,105	$49,284,069	$279,452	$40,453,81[illegible]
Utility plant-Capital lease	3,546	11,295	18,978	12,367	0	18,0[illegible]
Capitalized tank painting	67,083	47,272	301,479	0	0	0
Deferred depreciation	42,350	226,675	70,381	844,381	2,555	0
Post-in-Service AFUDC	101,685	593,662	129,792	1,166,563	4,691	0
Accum. depreciation & amort.	(619,451)	(4,658,199)	(6,878,388)	(8,361,201)	(26,568)	(9,691,114)
Accum. deprec. capital lease	(2,746)	(8,746)	(14,695)	(9,576)		(13,992)
Accum. Amort. of tank painting	(52,642)	(36,592)	(122,092)	0	0	0
Accum. Amort. Def. deprec.	0	(1,183)	0	(39,590)	0	0
Accum. Amort. Post AFUDC	0	(3,376)	0	(79,830)	0	0
Net utility plant	$12,954,179	$44,778,343	$27,580,560	$42,817,183	$260,130	$30,766,782
Contrib. in Aid of Construct.	(1,385,543)	(7,017,670)	(5,096,117)	(1,308,583)	(104,783)	(2,864,245)
Cust. Advances for Construct.	(237,969)	(1,942,195)	(696,676)	(143,005)	0	(209,744)
Acquisition adjustment	188,244	139,938	857,805	0	35,615	0
Materials and supplies	37,356	124,022	197,449	125,760	0	168,336
Total Rate Base	$11,556,267	$36,082,438	$22,843,021	$41,491,355	$190,962	$27,861,129

	Newburgh	Noblesville	Richmond	Seymour	Shelbyville	Summitville
Utility plant in service	$6,104,898	$16,538,860	$23,273,173	$12,343,026	$12,279,370	$337,781
Utility plant-Capital lease	3,250	2,922	10,332	4,017	3,776	274
Capitalized tank painting	0	0	0	0	0	0
Deferred depreciation	0	37,970	0	154,744	0	0
Post-in-Service AFUDC	0	91,170	0	128,905	0	0
Accum. depreciation & amort.	(911,360)	(1,140,753)	(6,923,832)	(2,736,680)	(1,532,075)	(103,140)
Accum. deprec. capital lease	(2,517)	(2,263)	(8,000)	(3,110)	(2,924)	(212)
Accum. Amort. of tank painting	0	0	0	0	0	0
Accum. Amort. Def. deprec.	0	0	0	(2,945)	0	0
Accum. Amort. Post AFUDC	0	0	0	(2,453)	0	
Net utility plant	$5,194,271	$15,527,906	$16,351,673	$9,885,504	$10,748,147	$234,70[illegible]
Contrib. in Aid of Construct.	(1,159,737)	(2,883,118)	(1,192,318)	(1,515,841)	(3,225,224)	(11,944)
Cust. Advances for Construct.	(337,297)	(414,210)	(84,481)	(203,601)	(510,320)	0
Acquisition adjustment	0	78,186	0	0	163,842	0
Materials and supplies	33,347	50,337	104,141	52,083	58,051	3,041
Total Rate Base	$3,730,584	$12,359,101	$15,179,015	$8,218,145	$7,234,496	$225,800

	Somerset Sewer	Somerset Water	Wabash	Wabash Valley	Total Company
Utility plant in service	$199,089	$183,711	$5,305,370	$45,271,640	$307,951,252
Utility plant-Capital lease	0	66	3,032	17,520	109,444
Capitalized tank painting	0	0	95,603	0	511,437
Deferred depreciation	0	0	0	208,744	1,587,800
Post-in-Service AFUDC	0	0	0	351,508	2,567,976
Accum. depreciation & amort.	(73,367)	(74,650)	(1,276,068)	(10,918,444)	(55,925,290)
Accum. deprec. capital lease		(51)	(2,347)	(13,567)	(84,746)
Accum. Amort. of tank painting	0	0	(73,615)	0	(284,941)
Accum. Amort. Def. deprec.	0	0	0	(47,683)	(91,401)
Accum. Amort. Post AFUDC	0	0	0	(80,304)	(165,963)
Net utility plant	$125,722	$109,076	$4,051,975	$34,789,414	$256,175,568
Contrib. in Aid of Construct.	(1,074)	(27,056)	(607,925)	(3,467,872)	(31,869,050)
Cust. Advances for Construct.	0	0	(127,666)	(302,629)	(5,209,793)
Acquisition adjustment	0	0	0	0	1,463,630
Materials and supplies	0	714	33,644	148,223	1,646,211
Somerset Rate Base Adjust.	(44,297)	(24,531)			(68,828)
Total Rate Base	$80,351	$58,203	$3,350,028	$31,167,136	$221,628,03

The inclusion of unamortized post-in-service AFUDC in the original cost calculation is consistent with the Commission's Orders in Cause No. 39150 dated June 19, 1991, Cause No. 39595 dated February 2, 1994, Cause Nos. 39924 and 39925 dated August 24, 1994, Cause No. 40442 dated October 2, 1996, and Cause No. 40701 dated April 9, 1997. The acquisition adjustment amount includes the 1967 Indiana Cities acquisition adjustment which the Commission has previously repeatedly found should be included in the original cost rate base. E.g., Indiana Cities Water Corp., Cause No. 36776 (PSCI 2/10/83) et al. Also included is the acquisition adjustment relating to the properties of Farmington Utilities, Inc. pursuant to the Commission's Order dated October 2, 1996 in Cause No. 40442. The treatment of these acquisition adjustments was not in dispute.

C. Reproduction Cost New Less Depreciation. A valuation of the reproduction cost new less depreciation ("RCNLD") of Petitioner's utility property was sponsored by Petitioner's witness John F. Guastella, a registered professional engineer and President of Guastella Associates, Inc. Mr. Guastella has extensive experience in the planning, design and operation of water and wastewater facilities and the valuation of utility property.

RCNLD represents the cost of reproducing the existing system at present day costs, reduced for the loss in value experienced by the existing system due to wear and tear, obsolescence and lack of utility. Mr. Guastella determined the reproduction cost new of Petitioner's utility property by applying cost trend factors to the original cost by vintage year of the various components of Petitioner's property (excluding land). Mr. Guastella testified that the primary source for the trend factors used in the study was the Handy-Whitman Index of Public Utility Construction Costs for Water Utilities located in the North Central United States. Mr. Guastella said that when compared and checked with current costs actually experienced by the Company, the resulting cost trends were shown to be satisfactory and reliable to use in the determination of the reproduction cost new of Petitioner's water utility property. Mr. Guastella determined the RCNLD by deducting depreciation necessary to reflect the current condition of the property. The method used by Mr. Guastella is well accepted and recognized by the Commission and the Courts. Hancock Rural Tel. Co. v. Public Serv. Comm'n, 137 Ind. App. 14, 201 N.E.2d 573, 586 (1964); City of Terre Haute v. Terre Haute Water Works Corp., 133 Ind. App. 232, 180 N.E.2d 110, 113 (1962); Southern Ind. Gas and

Elec. Co., Cause No. 35528, 31 PUR4th 505, 518 (PSCI 9/27/79); Indiana Cities Water Corp., Cause No. 39166, p. 33 (IURC 7/8/92).

The RCNLD of Petitioner's used and useful utility plant in service as of November 30, 1996, adjusted for the major projects and related retirements, is as follows:

Operation	RCNLD
Crawfordsville	$23,392,449
Johnson County	63,905,476
Southern Indiana	76,218,506
Kokomo	81,940,901
Muncie Sewer	375,191
Muncie Water	78,819,824
Newburgh	8,658,843
Noblesville	21,607,020
Richmond	55,899,012
Seymour	19,774,570
Shelbyville	19,991,801
Somerset Sewer	406,336
Somerset Water	459,486
Summitville	890,610
Wabash	16,244,548
Wabash Valley	81,459,937
Corporate	1,909,850
Total	$551,954,360

(Petitioner's Ex. JFG, pp. 25-26.)

The OUCC did not submit its own valuation of the RCNLD of Petitioner's utility property, nor did the OUCC challenge Mr. Guastella's study. Instead, OUCC witness Scott A. Bell challenged the use of RCNLD studies in general. He cited our Order in Northwest Ind. Water Co., Cause No. 40467 (IURC 3/26/97) for the proposition that there is a real possibility that a water system would not be reproduced today in the same fashion. Mr. Bell alleged that if Indiana-American's system were reproduced, changes in design and facilities would be made to improve pumping efficiency, distribution system efficiency, treatment process efficiency, water metering, and source of supply. He alleged that the system was not produced in one massive construction program, but rather on a piecemeal basis. He also claimed it was

constructed under different managements and different periods of demand.

On rebuttal, Mr. Guastella testified that even with every change in construction or other variable recited by Mr. Bell, the actual cost of construction to reproduce the plant in its entirety would be no less than the RCNLD value previously computed by Mr. Guastella. On cross-examination, Mr. Bell could not dispute this conclusion. Mr. Guastella testified that every change recited by Mr. Bell would in fact cause the reproduction costs to increase over the RCNLD value.

We recognize what we said in Northwest Indiana regarding our concern for the probability that Petitioner's plant would not be reproduced the same today. In that case, we also said:

> The OUCC's arguments regarding RCNLD are familiar to us. We recognize that no RCNLD study will achieve absolute perfection. Yet, as we have said many times previously, "[r]atemaking is, at best, an imprecise art." Indiana Gas Co., Cause No. 36816, 49 PUR4th 594, 609 (PSCI 10/27/82). This Commission routinely must rely on estimates which, we recognize, "can only be reasonable approximations." Boone County Rural Elec. Membership Corp. v. Public Serv. Comm'n, 239 Ind. 525, 535, 159 N.E.2d 121, 125 (1959). Accordingly, despite the minor shortcomings identified by the OUCC, we have found the use of the Handy-Whitman Index to be reliable in conducting RCNLD studies. Indiana Cities Water Corp., Cause No. 39166 (IURC 7/8/92); Indiana-American Water Co., Cause No. 39215 (IURC 5/27/92). We have also found that evidence of RCNLD is helpful in the task of determining fair value. See, id.; Southern Ind. Gas & Elec. Co., Cause No. 39871 (IURC 6/21/95), p. 18 ("*SIGECO*").

Id., p. 21. "[R]eproduction cost new cannot be disregarded in fixing a valuation for rate making purposes." Public Serv. Comm'n v. City of Indianapolis, 235 Ind. 70, 131 N.E.2d 308, 325 (1956) (Emmert, J., concurring). There is no evidence that the cost of reproducing Petitioner's plant would be less than $551,954,360. We therefore find that amount to be the RCNLD of Petitioner's utility plant, broken down as described above.

D. Replacement Cost. Petitioner's witness Dr. John A. Boquist testified that in economic theory the fair value of property should represent the depreciated replacement cost of the property, i.e., the cost today of similar assets with the same function and service potential. This definition captures the opportunity costs associated with allowing a firm to control its assets for the production of goods and services according to its business strategy. Any strategy which results in a value less than the assets' replacement cost should be abandoned, and the assets dedicated to other opportunities. This valuation concept is consistent with the work of James Tobin, developer of the "Tobin's q ratio," a widely accepted and recognized method of investment analysis which compares the market value of assets to their replacement cost.

Dr. Boquist testified that to make sure the impact of technological change was not understated in the replacement cost estimate, he asked the Petitioner to reduce the RCNLD computed by Mr. Guastella by the 1.34% long-run average annual rate of change in manufacturing productivity as reported by the U.S. Bureau of Labor Statistics. This adjustment combined with other rate base components results in a depreciated replacement cost value of $398,701,046. (Petitioner's Ex. JAB, p.64; Petitioner's Ex. JAB-6.) Dr. Boquist testified that this was a conservative estimate of fair value because land has been included at original cost (instead of its current value), the 1.34% rate for technological change probably exceeds the rate experienced by the water industry, and Mr. Guastella's RCNLD value already reflects the impact of present day construction practices.

E. Update of Prior Fair Value Finding. Mr. Cutshaw testified regarding the determination of fair value by updating the fair value finding in the 1996 Rate Order using the same methodology used in that order. The 1996 Rate Order found a fair value rate base of $261,571,000 as of December 31, 1994. Adjusting for inflation since that time (consistent with our order in PSI Energy, Inc., Cause No. 40003 (IURC 9/27/96)) and adding $42,178,000 in net plant additions since December 31, 1994 (consistent with the methodology of the 1996 Rate Order), Mr. Cutshaw derived an updated fair value amount of $318,870,000. (Petitioner's Ex. JLC, p. 13; Petitioner's Ex. JLC-1, Sch. 4.) OUCC witness Edward R. Kaufman pointed out that the Ibbotson Associates inflation rate for 1995 used by Mr. Cutshaw in this

calculation was subsequently corrected from 2.7% to 2.5%. Use of the revised 1995 inflation rate would change the result of this methodology to $318,331,583. (Public's Ex. 10, p. 21.) The OUCC also noted that the updated analysis also included Contributions in Aid of Construction ("CIAC") of $6,526,760. In South Haven Waterworks v. Office of the Utility Consumer Counselor, 621 N.E.2d 653 (1993), the Court of Appeals stated "South Haven asserts that as the owner of the plant it is entitled to a return on the fair value of the entire plant including the portion listed as CIAC. While South Haven owns the plant, the portions contributed are not investments for which a return is allowed." p. 655. Excluding CIAC results in a fair value rate base of $311,804,823. Petitioner argued in its "Reply Brief" that excluding the CIAC from its fair value rate base is inconsistent with the Commission's finding in the 1996 Order. The Commission has broad discretion in determining the Petitioner's fair value rate base, and will take into consideration all factors prior to entering a final determination.

F. Fair Value Determination. Ind. Code § 8-1-2-6 establishes that this Commission shall value a public utility's property at its "fair value". In Indianapolis Water Co. v. Public Serv. Comm'n, 484 N.E.2d 635 (Ind. Ct. App. 1985), the Indiana Court of Appeals confirmed that a utility should be entitled to earn a fair rate of return on the fair value of its rate base. The Court stated that "fair value" is a conclusion or final figure, drawn from all the various values or factors to be weighed in accordance with the statute by the Commission. Furthermore, in its determination of "fair value" the Commission may not ignore the commonly known and recognized fact of inflation.

In the Indianapolis Water Co. case, the Court of Appeals reaffirmed the holding in Public Serv. Comm'n v. City of Indianapolis, 235 Ind. 70, 131 N.E.2d 308, 325 (1956), that "reproduction cost new cannot be disregarded in fixing a valuation for rate making purposes." The Court of Appeals expressly stated that this observation is as pertinent today as in 1956. The Court of Appeals recently confirmed that the Commission must authorize rates that provide the utility with the opportunity to earn a fair rate of return on the fair value of its property. Gary-Hobart Water Corp. v. Office of Util. Consumer Counselor, 591 N.E.2d 649, 653-654 (Ind. Ct. App. 1992), transfer denied; Office of Util. Consumer Counselor v. Gary-Hobart Water Corp., 650 N.E.2d 1201 (Ind. Ct. App. 1995).

As previously discussed, the 1996 Rate Order found that the 1993 acquisition adjustment should be included in Indiana-American's fair value rate base but not be amortized as an above-the-line expense. In particular, the Commission explained:

> Based upon the evidence presented we find that the purchase price was reasonable and appropriate to include in Petitioner's fair value ratebase. However, we find it inappropriate to consider any above-the-line expense in Petitioner's income statement for ratemaking purposes. The only reason to do so would be to offset the rate result which would otherwise be indicated in an original cost jurisdiction to avoid confiscatory results if the involved transaction were reasonable. Here, we have given Petitioner authority to recognize 100% of its investment in rates through its fair value rate base. Thus, there is no confiscation concern to address through other means.

(Order, p. 15, emphasis added.) Also, on page 49 the Commission stated:

> Petitioner can and should be compensated for its investment in the Indiana Cities properties through informed fair value ratemaking by fully recognizing their fair value in its fair value rate base determination.

In that case, Indiana-American submitted extensive evidence regarding the cost savings from the combination of Indiana-American and Indiana Cities, showing that the savings were greatly in excess of the cost of the capital invested in order to make those savings possible. Under informed fair value ratemaking, Indiana-American will be compensated for that investment by recognition of the full amount of the purchase price in the fair value rate base. Indiana-American continues to incur the capital costs associated with the debt and equity funds used to acquire Indiana Cities. We must also continue to grant a fair value return increment which provides that compensation, an issue we shall discuss in more detail later.

The OUCC submitted no evidence as to its own estimates of the fair value of Petitioner's property. Based on the evidence of record, we find that the fair value of Indiana-American's utility property used and useful in the provision of utility service is not

less than $318,331,583. This fair value figure recognizes that the current value of Petitioner's property is well in excess of its historical cost but is less than its RCNLD because of technological advances over the years.

G. Fair Rate of Return. Having determined the fair value of Petitioner's property, the Commission must determine what level of net operating income represents a reasonable rate of return. This determination requires a balancing of the interests of the investors and the consumers. In Bethlehem Steel Corp. v. Northern Ind. Public Serv. Co., 397 N.E.2d 623, 630 (Ind. Ct. App. 1979), the Court instructs "[w]hat annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts." One consideration in evaluating the reasonableness of a utility's return is the utility's overall weighted cost of capital.

Petitioner and the OUCC both submitted evidence on Petitioner's cost of capital. To determine Petitioner's overall cost of capital, both used Petitioner's capital structure as of November 30, 1996, adjusted to reflect Petitioner's sale on July 1, 1997 of $20,000,000 in bonds and $7,000,000 in common stock pursuant to authority granted in the Commission's Order in Cause No. 40733 dated May 8, 1997. Accordingly, the parties are in agreement as to the capital structure to be used in determining the cost of capital. (Petitioner's Ex. JLC-2, Sch. 1, p. 1; Public's Ex.1, Sch. 1, p. 4.) There was no material difference regarding the cost of debt (although OUCC witness E. Curtis Gassert used the actual interest rate of the July 1, 1997 bond issue while Mr. Cutshaw's direct testimony used an estimate) and the cost of preferred stock. The parties, however, disagreed on the cost of common equity.

a. Cost of Common Equity.

i. Petitioner's Case-In-Chief Evidence. Petitioner presented the testimony of Dr. Boquist on Petitioner's cost of common equity. In his direct testimony Dr. Boquist expressed the opinion that an 11.75% cost of common equity would be reasonable for Petitioner.

In examining the cost of common equity, Dr. Boquist first employed the discounted cash flow ("DCF") model. The traditional DCF model states that the price of an asset today equals the present value of all the future cash flows that the asset will generate. The variation on the model often used in rate proceedings assumes that if the market price of the stock is known (as is the case with publicly-traded securities), the cost of equity can be determined by adding the expected forward-looking dividend yield (dividends per share divided by market price per share) and the expected long-term dividend growth rate. In other words, the discount rate component of the DCF model is treated as the cost of common equity.

Since Petitioner's common stock is not publicly-traded, Dr. Boquist used the six publicly-traded water companies followed by Value Line Investment Survey as a proxy group. He used current dividends and stock prices for the sample companies to determine the current dividend yield. Dr. Boquist converted the current dividend yield to a forward-looking basis by applying his estimate of one year of dividend growth. Dr. Boquist then added to the forward dividend yield the average growth rate in dividends experienced by the sample companies over the last ten years. This DCF approach arrived at an unadjusted result of 10.25%. (Petitioner's Ex. JAB, p. 20.) Dr. Boquist also testified that if the long-run average annual growth rate of the economy since 1980 of 6.89% were used as the growth component of the DCF model, the result would be 12.42%. (Id.)

Dr. Boquist also used the capital asset pricing model ("CAPM") which holds that the cost of equity is equivalent to the return on a riskless security plus a risk premium appropriate for the company being analyzed. The risk premium represents the equity risk premium for the entire market (the "market risk premium") multiplied by the beta coefficient of the company. The beta coefficient measures the responsiveness of a common stock's rate of return to that of the overall market. Dr. Boquist's unadjusted CAPM result for the proxy group was 11.28%. (Petitioner's Ex. JAB, p. 23.) Dr. Boquist used as the riskless rate the greater-than-ten-year maturity treasury bond yield computed by Merrill Lynch and reported in the Wall Street Journal (the "Merrill Lynch 10+ year treasury index"). The market risk premium was represented by the difference between the long-run (post-1926) arithmetic average rate of return on the Standard & Poor's 500

("S&P 500") and the average long-term government bond income return (interest) for the same period as reported in the Ibbotson Associates publication, Stocks Bonds Bills and Inflation 1996 Yearbook ("SBBI 1996 Yearbook").

Dr. Boquist added an adjustment of .75% or 75 basis points to his DCF and CAPM results to reflect the greater riskiness of Petitioner relative to the sample companies and to the large companies represented in the S&P 500. This greater riskiness, Dr. Boquist said, results from Petitioner's relatively small size, its investment quality, the relatively limited marketability of its securities, and its limited service area. When so adjusted, Dr. Boquist's results ranged from 11.00% to 12.03%. Dr. Boquist selected 11.75% as a reasonable estimate of Petitioner's cost of common equity. (Petitioner's Ex. JAB, p. 33.) His recommendation gave 75% weight to the CAPM result and 25% weight to the DCF result. Dr. Boquist gave greater weight to the CAPM result because he believed the CAPM better accounts for relative risks, particularly under current market conditions and because the DCF model tends to understate the cost of common equity.

Dr. Boquist also cautioned that the DCF and CAPM approaches determine the required rate of return on the market value of stock and that application of a market-derived rate of return to a book value (original cost) rate base would understate the required return because the market values of the pertinent stocks exceed their book values. Dr. Boquist also stated that when the fair value of a utility's property exceeds its original cost, application of a market-derived cost of capital to an original cost rate base will fail to provide the company with the benefit of the appreciation in the value of its property.

Dr. Boquist also testified that the Commission's rate of return finding must consider the regulatory risks associated with the 1993 acquisition adjustment. He stated that significant cost savings from the consolidation and integration of Indiana Cities and Indiana-American have been flowed through to the customers in the ratemaking process. But to achieve these savings, Indiana-American had to invest $17.4 million in excess of the book value of Indiana Cities. Unless regulation allows Indiana-American to earn a full return on this investment, the Company is exposed to the risk of not being able to recover its prudently incurred capital costs, even though the investment created significant benefits for

the customers. Therefore, how the Commission treats the 1993 acquisition adjustment will have a significant impact on the Company's required rate of return.

ii. OUCC's Evidence. OUCC witness William R. Sudhoff also used a DCF model in his analysis applied to the same Value Line group used by Dr. Boquist. Mr. Sudhoff used recent six month average dividend yields for the sample companies and converted those yields to a forward-looking basis by reflecting one-half of one year of dividend growth. The forward yields were added to averages of historical and projected growth rates in dividends per share ("DPS"), earnings per share ("EPS") and book value per share ("BVPS") for the sample comparison. Mr. Sudhoff's DCF analysis resulted in a common equity cost rate of 9.04%.

Mr. Sudhoff also applied a CAPM approach using an average of Value Line's betas for the sample companies. In the CAPM, Mr. Sudhoff used current average yields on long term and 5-year treasury bonds for the riskless rate. Mr. Sudhoff determined the market risk premium by comparing the return on the S&P 500 from 1926 to 1996 taken from the Ibbotson Associates publication, using both arithmetic and geometric averages, with long term and 5-year treasury bond total returns (interest plus or minus price changes) during the same period. Mr. Sudhoff's CAPM results ranged from 10.27% (using 5-year treasury bonds as the riskless rate) to 10.75% (using long-term treasury bonds as the riskless rate).

Mr. Sudhoff stated that in his opinion Indiana-American's cost of equity is approximately 25 basis points higher than the proxy group. His ultimate recommendation was a cost of common equity rate of 10.90%. Mr. Sudhoff justified his recommendation on the ground that it was close to the common equity cost rate finding made in the 1996 Rate Order.

iii. Petitioner's Rebuttal. In his rebuttal testimony, Dr. Boquist revised his common equity cost rate estimate from 11.75% to 11.70%, based upon updated information. His updated unadjusted DCF result was 9.80%. Dr. Boquist's updated unadjusted CAPM result was 11.31%. After making the size, quality and marketability adjustment of 75 basis points, Dr. Boquist's updated adjusted DCF and CAPM results were 10.55% and 12.06%, respectively. Giving 75% weight to the CAPM, Dr. Boquist testified his updated cost of common equity estimate was 11.70%.

Dr. Boquist also criticized Mr. Sudhoff's DCF approach, particularly his failure to adjust for a full year of forward growth in determining the dividend yield and for use of EPS and BVPS growth rates in determining the perpetual dividend growth rate, particularly because Mr. Sudhoff included negative historical percentages in his average caused by one-time accounting adjustments and write-offs. In rebuttal, Dr. Boquist also stated that Mr. Sudhoff applied improper averages to calculate the market risk premium in his CAPM and failed to match the bond terms used for the risk-free rate with those represented by the Ibbotson data. Dr. Boquist stated that Mr. Sudhoff's company-specific risk adjustment of 25 basis points was inadequate. He testified Mr. Sudhoff failed to give any consideration to the regulatory risk from the OUCC's proposed treatment of the 1993 acquisition adjustment and proposed excess capacity standard. Dr. Boquist pointed out Mr. Sudhoff's reliance on the common equity cost rate finding in the 1996 Rate order was misplaced since the OUCC proposed to deny Indiana-American the fair value increment authorized in that case and the Commission's finding was expressly tied to the fair value rate base method applied in that case which the OUCC's proposal would eliminate. Dr. Boquist also disputed Mr. Sudhoff's contention that the need for a small-company risk adjustment is offset by regulation which, according to Mr. Sudhoff, "guarantees" a utility the opportunity for a reasonable profit. Mr. Boquist showed that the OUCC's original proposal would result in a return on equity of only about 7.66% which he stated was inadequate and the antithesis of reasonable profit. (Petitioner's Ex. JAB-R, p. 36; Petitioner's Ex., JAB-R-1.)

iv. Commission Findings. For the reasons described hereafter, the Commission finds that a common equity cost rate of 11.00% is appropriate.

There was disagreement between Petitioner and the Public over the mechanics of the DCF model. Dr. Boquist chose to use the full-year method in the calculation of the forward dividend growth yield, while Mr. Sudhoff utilized the half-year method.

The Commission has considerable experience with the DCF model for estimating cost of capital. We are well aware of the advantages and limitations of the various approaches used by each of the witnesses. For example, the half-year method used by the OUCC for calculating the forward dividend yield is the most

frequently used approach in this jurisdiction, and is rarely a point of contention in DCF analyses. We believe it fairly represents the dividend payments expected and received by investors, while the full-year method employed by Petitioner overstates the dividend yield.

Regarding CAPM, the major point of contention between Petitioner and Public was the Public's weighing of both the arithmetic mean and the geometric mean in calculating the risk premium. The debate over the proper use of the arithmetic and geometric means is one we consider resolved. As we stated in Indianapolis Water Company, Cause No. 39713, each method has its strengths and weaknesses, and neither is so clearly appropriate as to exclude consideration of the other. The Commission is well aware that using the geometric mean in CAPM analysis always yields a higher result than using the arithmetic mean. This is one of the reasons why Petitioner's CAPM results were consistently higher than those of the OUCC, who weighed both means in its analysis.

After deriving estimates of cost of equity for their proxy groups, both parties made adjustments to account for risks specific to Petitioner. Mr. Sudhoff added 25 basis points to his range of cost of equity estimates to account for the specific investment risk of the Petitioner. Dr. Boquist's "quality" adjustment added 75 basis points.

Granting the Petitioner a return on the entire fair value of its utility properties, including the Indiana Cities properties, lessens its risk profile. Neither party attempted to quantify this reduction in risk. We believe that any heightened risk exposure of Petitioner due to its small size and lack of marketability for its securities is offset by the reduction in regulatory risk due to the fair value treatment of the acquired Indiana Cities properties by this Commission. It is therefore not necessary to make any direct adjustments to our cost of equity estimates for business, investment, or regulatory risk purposes.

The DCF analyses presented in this case by both parties established a range of values from 9.04% to 9.80%. The CAPM analyses results ranged from 10.25% to 11.31%. Having considered all the evidence of record, we find that Petitioner's cost of equity capital is 11.00%.

In conclusion, we find that an 11.00% common equity cost rate should be used to determine Petitioner's overall weighted cost of capital in this proceeding.

b. Overall Weighted Cost of Capital. Use of an 11.00% cost of common equity produces an overall weighted cost of capital for Petitioner determined as follows:

	Amount	Percent	Cost	Weighted Cost
Long Term Debt	$130,946,309	52.85%	7.80%	4.12%
Preferred Equity	901,692	0.36%	5.75%	0.02%
Common Equity	96,485,879	38.94%	11.00%	4.28%
Deferred Taxes	16,165,553	6.52%	0.00%	0.00%
Cust. Deposits	14,746	0.01%	6.00%	0.00%
Pre-1971 IT	125,606	0.05%	0.00%	0.00%
Post-1970 IT	3,121,345	1.26%	9.14%	0.12%
Accum. Dep. on Muncie Sewer CIAC	19,804	0.01%	0.00%	0.00%
Total	$247,780,934	100.00%		8.54%

The cost rate we have assigned to the post-1970 investment tax credits is the overall weighted cost of investor-supplied capital determined as follows:

	Amount	Percent	Cost	Weighted Cost
Long Term Debt	$130,946,309	57.35%	7.80%	4.47%
Preferred Equity	901,692	0.39%	5.75%	.02%
Common Equity	96,485,879	42.25%	11.00%	4.65%
Total	$228,333,880	100.00%		9.14%

This is consistent with the methodology adopted by the Commission in Indianapolis Power & Lt. Co., Cause No. 37837, p. 18, (PSCI 8/6/86). The accumulated depreciation on contributed property in the Muncie sewer operation is included in the capital structure as zero cost capital pursuant to the Commission's order dated October 2, 1996 in Cause No. 40442.

6. Fair Rate of Return On Fair Value. As we have said many times, cost of capital is not synonymous with a fair rate of return

on fair value. It our duty to determine what rate of return on fair value is reasonable. As Dr. Boquist explained, the cost of capital is a percentage which can be converted into an earnings requirement only by applying that percentage to a rate base. The United States Supreme Court has held that the U.S. Constitution does not require "a single theory of valuation as a constitutional requirement" and "[t]he Constitution within broad limits leaves the States free to decide what ratesetting methodology best meets their needs in balancing the interests of the utility and the public." Duquesne Light Co. v. Barasch, 488 U.S. 299, 316 (1989). Indiana has selected the fair value rate base methodology. The Court described the fair value approach as follows:

> Under the fair value approach, a "company is entitled to ask . . . a fair return upon the value of that which it employs for the public convenience," while on the other hand, "the public is entitled to demand . . . that no more be exacted from it for the use of [utility property] than the services rendered by it are reasonably worth." 169 U.S., at 547. In theory the Smyth v. Ames fair value standard mimics the operation of the competitive market. To the extent utilities' investments in plants are good ones (because their benefits exceed their costs) they are rewarded with an opportunity to earn an "above-cost" return, that is, a fair return on the current "market value" of the plant. To the extent utilities' investments turn out to be bad ones (such as plants that are canceled and so never used and useful to the public), the utilities suffer because the investments have no fair value and so justify no return.

488 U.S. at 308-309.

i. Treatment of 1993 Acquisition Adjustment. As we discussed in the 1996 Rate Order, the Indiana fair value rule is very significant with respect to our treatment of the acquisition adjustment. We must consider the value of Indiana-American's investment to acquire Indiana Cities, how a competitive market would treat Indiana-American for making such an investment and how

this investment has served to bring the property of Indiana-American to its present state of efficiency.

Dr. Boquist discussed these issues in his rebuttal testimony. Dr. Boquist stated that the $37 million investment to acquire Indiana Cities (including the $17.4 million acquisition adjustment) was required in order to achieve the cost savings made possible by combining Indiana Cities with Indiana-American. The 1996 Rate Order on page 7 described these cost savings as "the natural result of a sensible combination of utility systems" and "natural synergies." This increased efficiency was derived at the cost of $17.4 million of purchase price over book value. Dr. Boquist showed that this is consistent with what would happen in a competitive market by quoting from Bradford Cornell's book Corporate Valuation, p. 23, as follows:

> In accord with common sense, modern finance teaches that corporate investment decisions should be based on a simple rule: Buy an asset if the value of that asset to the company exceeds its cost. For example, if FEC [a printing company] determines that a press that costs $1 million will produce benefits to the company with a present value of $1.5 million, FEC should buy the press.

The same is true of Indiana-American's purchase of Indiana Cities. Since the acquisition would produce benefits in cost savings in excess of the purchase price, modern finance theory prescribes that Indiana-American should have bought the Company at the purchase price it paid ($37 million). And in a competitive market the cost savings derived by combining the two companies would enhance the purchaser's operating income and thereby cover the capital costs associated with the purchase (interest on debt and earnings for the common stockholder). Recognition of the investment is required by the Indiana fair value statute (Ind. Code § 8-1-2-6(a)) which instructs:

> As one (1) of the elements in such valuation the Commission shall give weight to the reasonable cost of bringing the property to its then state of efficiency.

In the 1996 Rate Order, we found that Petitioner should be allowed a return on the full amount of the acquisition adjustment through the fair value rate base. We stated:

> Here, we have given Petitioner authority to recognize 100% of its investment in rates through its fair value rate base.

(1996 Rate Order, p. 15.)

We held that Petitioner would be allowed for ratemaking purposes a return on the acquisition adjustment but not a return of the acquisition adjustment.

In the 1996 Rate Order the Commission found the fair value rate base as of December 31, 1994 to be $261,571,000. The Commission applied a fair rate of return of 6.5% to this fair value amount to determine an authorized net operating income ("NOI") of $17,002,115. The Commission approved rates designed to produce this NOI level. The Commission also found the original cost rate base without the acquisition adjustment to be $186,279,406 and the cost of capital to be 8.53%. This would result in an original cost return of $15,889,633. Therefore, the fair value increment over and above the original cost return was $1,112,482, computed as follows:

Fair Value Return	$17,002,115
Original Cost Return	-15,889,633
Fair Value Increment	$ 1,112,482

The rates approved by the Commission also provided revenues to cover the income taxes relating to the total fair value return.

In this proceeding, the OUCC did not include the $17.4 million acquisition adjustment in the original cost rate base, and once again, the OUCC failed to provide any evidence concerning what it believed to be a reasonable fair value rate base. The Petitioner presented evidence that it should earn a higher return on the acquisition adjustment investment than on its remaining fair value rate base as it was in the 1996 Rate Order. The Commission finds no evidence to support this disparate treatment. In conclusion, the Commission finds that the 1993 acquisition adjustment should be included in the fair value rate base as it was in the 1996 Rate

Order, and that one rate of return should apply to the entire fair value rate base.

ii. Petitioner's Evidence Regarding Fair Return. Dr. Boquist testified that the return of a utility should correspond to the return investors could earn on investments of comparable risk in the unregulated sector. If investors can earn a larger return and bear identical risks, or conversely earn identical returns with less risk, by investing in other (non-utility) industries, they will do so. Failure to recognize this fact would make it difficult for utilities to raise capital on a competitive basis. Dr. Boquist expressed the opinion that Petitioner should be allowed to earn a fair rate of return on the fair value of its property comparable to the rate of return which unregulated companies of comparable risk earn on the fair value of their assets. Therefore, Dr. Boquist selected a group of unregulated companies of comparable risk for purposes of his analysis.

Dr. Boquist first identified comparable-risk unregulated companies by using the approach advocated by Fama and French in a 1992 study published in the Journal of Finance and in subsequent papers. Fama and French concluded that the size of a firm measured by the market value of its equity ("ME") and the ratio of a firm's book value of equity to a firm's market value of equity (book-to-market equity ratio or "BE/ME") are the two risk factors influencing common stock returns because they have strong ties to economic fundamentals such as profitability and the growth of earnings and assets that have long been associated with investment performance. Fama and French contend these factors explain stock returns better than beta.

Dr. Boquist replicated the Fama and French study approach by performing a computer analysis of nonregulated firms in the New York Stock Exchange, American Stock Exchange and NASDAQ return files from the Center for Research in Security Prices and the merged COMPUSTAT annual industrial files of income statement and balance sheet data. The time period covered by this study extended from 1973 through 1994, the latest data available to Dr. Boquist at the time his direct testimony was prepared. The companies were then partitioned into matrixes for each year based upon the two key Fama and French risk factors. Dr. Boquist then developed for each year a portfolio of comparable companies reflecting the range of ME and BE/ME values for his six proxy companies.

Dr. Boquist then determined the pre-tax rate of return earned by the comparable companies on the depreciated replacement cost of their assets. To determine replacement cost, Dr. Boquist used the techniques described in the definitive work of Lindenberg and Ross, published in the Journal of Business in 1981 which prescribes a methodology for estimating replacement cost of a firm's assets from its accounting statements. This method considers price level changes, technological change, real economic depreciation and investment in new plant and equipment. The same 1.34% technological change adjustment used by Dr. Boquist in his determination of Petitioner's depreciated replacement cost was used for the comparable companies. Dr. Boquist testified that he measured before income tax operating profit to eliminate the effects of leverage (the interest of which affects income taxes), the tax strategies some firms employ and tax loss carry forwards and carrybacks available to some companies. From this study Dr. Boquist determined that the average annual pre-tax rate of return on replacement cost for the comparable companies from 1978 through 1994 was approximately 7.28%. He concluded that a rate of return of 7.28% before income taxes on the fair value of Petitioner's property, measured on a depreciated replacement cost basis, would, therefore, be fair and reasonable.

iii. OUCC Response. OUCC witness Sudhoff cited a number of problems with Petitioner's comparable risk approach for estimating the fair rate of return on its fair value rate base. Specifically, the OUCC claims that the study is flawed for the following four reasons: 1) historical realized returns are not cost of equity estimates; 2) the entire analysis is dependent on the appropriateness of the purchase price for the Indiana Cities properties; 3) the Fama and French methodology has been challenged by academic sources; and 4) a reproduction of Dr. Boquist's study produces an almost completely different set of "comparable" firms.

iv. Discussion. The Commission agrees that historical realized returns are not cost of equity estimates. We are aware that it is only by chance that historical returns will provide an estimate equal to the actual cost of capital. Although this Commission has not always embraced the use of the comparable earnings methodology in past rate cases, this is largely because we perceived significant deficiencies in the application of the methodology in specific instances, and the use to which it was being put. We have already observed that all methodologies for

estimating the cost of capital have their unique advantages and limitations. The comparable earnings approach distinguishes itself in that it is one of the most difficult estimating techniques to employ. The reliability of comparable earnings analysis is largely dependent on the skill and judgment of the analyst, and the ability to compensate for accounting data problems and the effects of inflation. It is Petitioner's position that historical returns can be used to determine the rate of return earned by comparable risk companies on the replacement cost of their property for the purpose of analyzing what would be a fair rate of return on the fair value of Indiana American's property (JAB, p. 59). It appears to the Commission that Petitioner is advocating the use of historic returns, albeit on replacement cost, to establish a benchmark against which a fair rate of return can be evaluated. Although we agree that Petitioner's comparable earnings approach is not the best methodology for estimating fair return because of the questionable predictive value of the results, it can be used for the purposes of assisting the Commission in establishing a range of values to consider, and testing the reasonableness of our fair return finding.

Similarly, we agree with the OUCC that the entire analysis is predicated on Indiana Cities' purchase price being a legitimate proxy for the market valuation of the entire Indiana American system. In our 1996 Order we addressed these concerns. These criticisms have little merit under the circumstances and do not preclude consideration of the Petitioner's results.

We view the criticisms of the Fama and French methodology by various academic sources as further evidence of the model's shortcomings and limitations that enhance our understanding, rather than fatal flaws that prohibit its use. Again, all methods for estimating the cost of capital are potentially helpful provided that the users of such information are cognizant of biases and make the necessary adjustments. The gist of the Public's argument seems to be that there are methodologies using beta, which it deems to be a better proxy for risk, that are superior to the comparable earnings approach selected and used by Petitioner. That may very well be true. We will remind the Public that it was free to perform any alternative analysis it chose, and to persuade us with a different, and perhaps superior, technique and estimate for the fair rate of return. The OUCC did not do so.

Finally, the OUCC pointed out Dr. Boquist used the identical analysis and results in Cause No. 40467, Northwest Indiana Water Company, a year prior to this Cause of action. In the Commission's Order in Cause No. 40467, the Commission stated that it had "serious misgivings about the use of the Fama-French model in this case and the fair return estimate of 7.28% generated by it."

The OUCC has raised legitimate concerns relating to the Fama and French model itself, and to Petitioner's application of the model as well. We agree that changing the inputs and assumptions may have resulted in a different estimate for fair return, and that use of a different estimating technique might have yielded a superior estimate. Neither of these contentions persuade us to reject Petitioner's evidence, however. Although we recognize that Petitioner's estimate is far from perfect, it is not so problem-plagued as to render it useless. The Commission believes that the Petitioner reasonably applied a very difficult model to derive its estimates. Furthermore, Petitioner presented the only evidence of record on the issue of fair return. Were we to reject this evidence, we would be left with only our own estimates for fair return to establish a reasonable range; we would have nothing against which to measure the reasonableness of our finding.

It is not enough for the OUCC to present the Commission with an original cost test for establishing the reasonableness of a fair return. We acknowledge that under certain circumstances, an original cost return applied to an original cost rate base will closely approximate or equal a fair return applied to a fair value rate base. This is not one of those cases, however, because Petitioner's market-to-book ratio is not 1.0. We have already observed that this problem can be adequately addressed by establishing rates based on fair value. Moreover, we are statutorily mandated to do so. The original cost method for establishing return is separate and distinct from the fair value method, despite the fact the results may be very similar under certain conditions. In this case, we are limited to Petitioner's evidence on the issues of fair value rate base and fair return because the OUCC provided no alternatives for our consideration.

Other evidence exists in the record of these proceedings that can be used to establish estimates for the Petitioner's fair return. The Courts have recognized that utilities are to earn a return upon the fair value of their rate base, which reflects the

effects of historic inflation. In order to avoid over-compensating Petitioner for the effects of historic inflation it is necessary to remove the historic inflation component from the costs of capital to derive a fair return. We are aware that all components of Petitioner's capital structure reflect historic inflation to some extent, some more than others. For example, the cost of equity not only reflects historic inflation, but anticipated or prospective inflation as well. The evidence on inflation presented in this case was meager, and no evidence was presented on the effects of inflation on the individual components of the Petitioner's capital structure other than debt. This forces the Commission to take a more conservative approach for estimating the fair rate of return than it otherwise may have taken under different evidentiary circumstances. We will therefore eliminate the effects of historic inflation from only the debt component of the Petitioner's capital structure because the embedded cost of debt reflects historic inflation exclusively.

Petitioner's witness Cutshaw determined a fair rate of return by recomputing Petitioner's proposed weighted cost of capital by deducting from the embedded cost of debt the average annual inflation rate since 1952 of 4.1%. In the 1996 Rate Order, the Commission found that the historic inflation rate was 4.2% for the 1952 through 1993 period. This results in a fair value rate of return of 6.3% using the methodology employed in the 1996 Rate Order.

A useful tool for examining the reasonableness of a fair value return is a comparison to the results generated by applying the weighted cost of capital of 8.54% to the original cost rate base of $221,628,031, which in this case generates a net operating income ("NOI") of $18,927,034. Although we have already discussed the inappropriateness of the OUCC's original cost test for establishing the reasonableness of our fair value finding in this case, the test can be performed to exclude results that are clearly outside the range of reasonableness under any methodology.

To determine a reasonable and acceptable return on fair value in the instant case, the Commission must also strive to simultaneously achieve certain other desirable objectives to the extent practicable. First, we must endeavor to alleviate the problems that result from Petitioner's market-to-book ratio being in excess of one. We recognize and have already observed that

market-to-book ratios in excess of 1.0 tend to understate the net operating income necessary to produce a given level of return to sufficiently compensate shareholders. Second, and similarly, the Commission also is aware that the DCF methodology for computing the cost of capital assumes a 100% payout ratio, which the Commission does not advocate. Payout ratios of 100% preclude the retention of funds in a business that are necessary to assure the ongoing provision of safe, adequate, and reliable service. Finally, the Commission has found that Petitioner can and should be compensated for its investment in the Indiana Cities' properties through informed fair value ratemaking by fully recognizing their fair value in its fair value rate base determination. The Commission must now ascertain a fair rate of return to apply to its fair value rate base that will result in a net operating income that adequately and fairly compensates Petitioner for its investments, while maintaining Petitioner's financial viability so that it can continue to attract capital in the marketplace. Based on all the evidence of record, we find that a fair value return of 6.50% produces the desired results. Applying the fair return of 6.50% to the fair value ratebase of $311,804,823 previously found generates an NOI of $20,267,313, which adequately balances the interests of ratepayers, the utility and its shareholders, and achieves the objectives set forth above.

H. <u>Depreciation Accrual Rates</u>. As required by the Prehearing Conference Order dated February 8, 1995 in its last rate case and the Commission's Order dated September 26, 1990 in Cause No. 38880, Indiana-American presented a depreciation study. The study was performed by William M. Stout, President of Gannett Fleming Valuation and Rate Consultants, Inc. Mr. Stout is a professional engineer with experience in depreciation, valuation and cost allocation studies. Mr. Stout has conducted several hundred depreciation studies in his career for water, wastewater, gas, electric, telephone and railroad companies.

In performing the study Mr. Stout estimated service lives and net salvage characteristics for each depreciable property group by compiling historical data, analyzing historical trends, obtaining information from management and operating personnel regarding the Company's practices and plans, and interpreting this information based on his experience and judgment. He plotted retirement rate data to form original survivor curves and selected Iowa-type survivor curves (generalized survivor curves which smooth and

extrapolate historical retirement rate data) to forecast average service lives. After selecting estimated service lives and net salvage characteristics, Mr. Stout calculated annual depreciation accrual rates for each depreciable group in accordance with the straight line remaining life method using remaining lives consistent with the equal life group ("ELG") procedure. In the ELG procedure, the remaining life annual accrual for each vintage of property in an account is determined by dividing future book accruals (original cost less book reserve) by the composite remaining life of that vintage. Mr. Stout's proposed depreciation rates are shown on Petitioner's Ex. WMS-2, pages III-4 and III-5.

OUCC witness Sarah J. Mamuska proposed certain changes to Mr. Stout's depreciation study. Her suggested changes would result in a composite depreciation rate based on December 31, 1995 depreciable plant balances (the study date) of 2.45% as opposed to 3.34% from Mr. Stout's recommendations. (Public's Ex. 5, p. 3.) Ms. Mamuska agreed with the use of the straight line remaining life method and accepted Mr. Stout's net salvage percentages. However, Ms. Mamuska used the vintage group ("VG") or average service life ("ASL") procedure instead of the ELG procedure because she thought the ELG procedure should be adopted only for property placed in service from 1995 forward. (Id., p. 4.) Under the VG procedure, an average service life is determined for the aggregate of all vintages of property in an account. Ms. Mamuska contended the ELG procedure was front loaded and that application of the ELG procedure to embedded plant would be retroactive ratemaking because it would result in a depreciation shortfall which "must be borne by current and future customers" since it cannot be charged to previous customers. She cited the FCC as having implemented the ELG procedure on a going-forward basis. Ms. Mamuska also proposed that different service lives and survivor curves than those selected by Mr. Stout be used for certain accounts.

In rebuttal Mr. Stout disputed Ms. Mamuska's position regarding the ELG procedure. He stated that the ELG procedure accurately reflects the accrual of depreciation while the VG/ASL procedure does not fully accrue depreciation on short-lived assets during their actual remaining life. The ELG procedure permits the recovery of future accruals related to each group of assets with an equal life over the actual remaining life of those assets. Mr. Stout said there was no retroactive ratemaking with the ELG procedure and, in fact, the total amount to be accrued in the

future under the remaining life method is identical regardless of whether the ELG or VG/ASL procedure is used.

Mr. Stout stated that while the ELG method has long been recognized as more accurate, its widespread use was once constrained due to the many computations which are required. However, with the advent of modern computer equipment, this constraint has been removed. Mr. Stout also pointed out that the ELG method has been well accepted in Indiana since 1981 and has also been accepted by many other commissions around the country. He said that while the FCC back in 1980 adopted the ELG procedure prospectively, that implementation method was at the request of AT&T and subsequently became moot when the FCC authorized telephone companies to amortize their depreciation reserve deficiencies over five years rather than the remaining lives of the assets.

Mr. Stout identified 25 accounts representing 24% of the plant for which he and Ms. Mamuska were in agreement on the appropriate survivor curves. For other accounts representing 46% of the plant (mains, meters and meter installations), there was little difference in the survivor curves. Mr. Stout stated that Ms. Mamuska's slightly altered estimates for these three accounts implied a precision in forecasting service life that is unrealistic, such as changing a 60 year life for meter installations to 63 years. Mr. Stout accepted Ms. Mamuska's life estimates for nine accounts representing 5% of the plant. With respect to the remaining accounts (representing 25% of plant) Mr. Stout disputed the accuracy of Ms. Mamuska's position, contending that her conclusions were based on analyses of periods during which retirements were inadequate to develop statistically valid results and contained unrealistically long maximum life assumptions. Mr. Stout presented for comparison purposes a schedule showing the depreciation rates which would result from Ms. Mamuska's's life estimates and survivor curve selections in combination with the ELG procedure for all vintages. (Petitioner's Ex. WMS-R-2.)

The Commission previously required Indiana-American to submit a depreciation study so that we could evaluate and adjust its depreciation rates as appropriate. We find that the methodology followed in Indiana-American's depreciation study is reasonable and should be accepted. In particular, as we have recognized before, the ELG procedure is more accurate than the VG/ASL procedure and better matches future accruals with the actual remaining lives of

the various assets within an account. We have long accepted the ELG procedure (also known as the unit summation method) for all types of utilities. E.g., Citizens Gas and Coke Util., Cause No. 36361 (PSCI 10/1/81); Indiana Gas Co., Cause Nos. 36816, 49 PUR4th 594, 613-614 (PSCI 10/27/82) and 38080, 86 PUR4th 241, 297-298 (IURC 9/18/87); Indiana Bell Tel. Co., Cause Nos. 38376 (IURC 2/17/88) and 39525 (IURC 8/11/93); Public Serv. Co., Cause Nos. 37414-S2 and 38809, 112 PUR4th 94 (IURC 4/4/90). In the latter case, we quoted with approval from the testimony of the Commission staff depreciation analyst as follows:

> "The ELG based rates match capital recovery with plant consumption better than the ALG [also known as VG and ASL] procedure because ELG fully accounts for the expected life of each asset in the vintage to develop an accurate, averaged rate. . . . [I]t is evident that the ELG procedure produces a better recovery/consumption match."

112 PUR4th at 145.

We do not agree that application of ELG to embedded plant would be retroactive ratemaking. Under any method the current undepreciated balance of the property in each account would be recovered prospectively. For example, both Mr. Stout and Ms. Mamuska show that as of December 31, 1995 a total amount of $296.5 million would need to be accrued in the future. (Petitioner's Ex. WMS-2, p. III-5; Public's Ex. 5, Sch. SJM-1, p. 2.) Accordingly, we reject the OUCC's proposal to implement ELG only for property placed in service after 1995. For reasons discussed in the Public Serv. Co. Order, it would not be appropriate to defer the benefits from using the ELG procedure:

> In view of the significant capital expenditures which Petitioner will be incurring during the next decade, it is appropriate to improve the accuracy of Petitioner's depreciation rates at this time, as opposed to some date in the future after the large capital expenditures will already have been made and begun to depreciate at a different, less accurate rate. Therefore, we

> find that PSI's proposed use of depreciation rates based on the ELG procedure is reasonable, appropriate and is hereby approved.

112 PUR4th at 146.

Nor can we agree with the OUCC's contention that the ELG procedure "front loads" depreciation accruals. As we stated in the Public Service Co. Order, "[t]he ELG procedure remains a straight-line procedure . . . and does not permit the recovery of large amounts of capital of a particular asset in the earlier years of its life." 112 PUR4th at 146. We explained that "whether the speed of capital recovery under the ELG procedure is quicker or slower than under the ALG procedure is really a function of the life of the asset, as it should be." Id. at 145.

With respect to mains, meters, and meter installations (Accounts 343, 346 and 347), we accept Mr. Stout's proposed account and subaccount depreciation rates as shown on Petitioner's Ex. WMS-2. Ms. Mamuska recommended modifying the estimated lives by a small but precise amount -- from 100 to 102 years for mains, from 14 to 14.1 years for meters and from 60 to 63 years for meter installations. (Petitioner's Ex. WMS-R, p. 13.) Ms. Mamuska's effort to overly refine the life estimates implies a precision in forecasting service life that does not really exist in depreciation analysis. Therefore, we conclude that no material basis exists for rejecting Mr. Stout's proposed depreciation rates for these accounts.

Mr. Stout stated on rebuttal that he was willing to accept Ms. Mamuska's life estimates for Accounts 311, 314, 316, 391.1, 391.21, 392.11, 394, 395 and 397. (Petitioner's Ex. WMS-R, p. 14.) He intended to show on Petitioner's Ex. WMS-R-2 the depreciation rates which would result for these accounts and subaccounts with Ms. Mamuska's life estimates in combination with the ELG procedure for all vintages. However, at the final hearing Mr. Stout stated on cross-examination that he inadvertently failed to incorporate Ms. Mamuska's life estimates for Account 311 (structures and improvements) and Account 314 (wells and springs). We find that for the above referenced accounts the depreciation rates shown on Petitioner's Ex. WMS-R-2 should be accepted except for Accounts 311 and 314. We accept Ms. Mamuska's proposed depreciation rates for

Accounts 311 and 314. The life estimates for these accounts do not anticipate dispersion of retirements within a vintage and, therefore, the rates would be the same regardless of whether the ELG or VG/ASL procedure is used.

For accounts 321, 323.02, 325, 342, 345, 348 and the combination of Accounts 341, 390.1, 390.2 and 390.3 we accept the proposed depreciation rates shown on Petitioner's Ex. WMS-2. Mr. Stout showed on rebuttal that Ms. Mamuska's proposal for Account 321 (structures and improvements) was overly influenced by a single relatively small retirement at age 46 and low levels of retirements after that age. We agree with Mr. Stout's position that for this account it is better to estimate the life of each of the structures individually (rather than apply a statistical approach) as both witnesses did for other accounts containing structures.

Account 323.02 represents other power production equipment. Mr. Stout said Ms. Mamuska's recommendation was based on data for a 10-year period which was insufficient to serve as a valid statistical basis for forecasting service life. Therefore, Mr. Stout combined this account with several pumping equipment accounts for life analysis and estimates because the life characteristics of these types of properties are similar. We find Mr. Stout's approach to be reasonable. We also accept Mr. Stout's proposal for Account 325 (electric pumping equipment). Mr. Stout said that the ten year period relied on by Ms. Mamuska included some major plant modifications and was not representative of average future conditions. A longer period such as the twenty year period used by Mr. Stout is more appropriate. Mr. Stout also showed that Ms. Mamuska's approach resulted in anomalous conclusions such as a maximum life of nearly 130 years which is clearly unreasonable for pumping equipment.

For similar reasons we accept Mr. Stout's proposals for Accounts 342 (reservoirs and standpipes), 345 (services) and 348 (hydrants). In Wolf and Fitch, Depreciation Systems, it is stated:

> After plotting the observed curve, the analyst should first visually examine the plotted data to make an initial judgment about the type curves that may be good fits. The analyst also must decide which points or sections of the curve should be given the most weight.

> Points at the end of the curve are often based on fewer exposures and may be given less weight than points based on larger samples. The weight placed on those points will depend on the size of the exposures.

(Petitioner's Ex. WMS-R, pp. 23-24.)

For these reasons, a depreciation analyst cannot rely purely on mathematical fitting of data but must instead use engineering judgment and consider other factors. Mr. Stout noted that for these accounts Ms. Mamuska relied on retirement ratios developed from inadequate exposures of plant at greater ages, i.e., at the end of the life table. Her interpretation, incorporating reliance on inadequate data, results in unreasonably long maximum lives, such as 137 years for reservoirs and standpipes. Mr. Stout's proposals for these accounts are more reasonable. His estimates are based on interpretations of the portion of the original survivor curves which reflect exposures of plant. Moreover, these estimates are within the range of estimates used by other utilities and result in reasonable maximum lives.

In summary, we accept and approve the proposed depreciation rates shown on Petitioner's Ex. WMS-2 except to the extent we have specified otherwise above. The sources of the approved depreciation rates are as follows:

Account	Source
311.00	SJM-1
314.00	SJM-1
316.00	WMS-R-2
391.10	WMS-R-2
391.21	WMS-R-2
392.11	WMS-R-2
394.00	WMS-R-2
395.00	WMS-R-2
397.00	WMS-R-2
All others	WMS-2, Pages III-4 and III-5

We find that the depreciation rates applicable to new additions to certain miscellaneous intangible plant, office furniture and equipment, transportation equipment, and other equipment accounts identified by asterisks on Petitioner's Ex. WMS-2 should be determined by dividing 100% by the average life shown on this exhibit (or on Petitioner's Ex. WMS-R-2 where our approved rate is based on this schedule). Mr. Stout explained that the accrual rates calculated as of December 31, 1995 would not be appropriate for new additions to these accounts because high levels of past accruals cause the remaining life rate to be significantly less than the whole life rate. Therefore, it is appropriate that new additions to these accounts begin with a clean slate.

Ms. Mamuska also recommended that Indiana-American keep depreciation reserve records on an account basis. Mr. Cutshaw testified that Indiana-American already does so. (Petitioner's Ex. JLC-R, p. 20.) Petitioner should continue its current practice of keeping depreciation reserve records on an account basis.

I. Test Year and Operating Results Under Present Rates. Pursuant to the Prehearing Conference Order, the test year to be

used for determining Petitioner's actual and pro forma operating revenues, expenses and operating income under present and proposed rates is the 12 months ended August 31, 1996.

a. Revenue Adjustments. In determining its pro forma financial results under its present rates, Indiana-American calculated adjusted total-company revenues of $61,260,148. (Petitioner's Ex. MGT-1, Sch. 1.) The OUCC used the same pro forma level of revenues at present rates. This pro forma revenue level, therefore, will be accepted for ratemaking purposes.

b. Uncontested Operating Expense Adjustments. There were no material differences at pro forma present rate levels between the accounting exhibits of Indiana-American and the OUCC regarding adjustments for chemicals, waste disposal, management fees, accrual cost of post-retirement benefits other than pensions pursuant to Statement of Financial Accounting Standards No. 106, pensions, insurance, rents, general office, maintenance, amortization, IURC fees, and gross receipts taxes. In addition, Petitioner did not challenge the OUCC's proposed adjustments for purchased water, purchased power, removal of a 3 ½% premium increase for group insurance, rate case expense and environmental tax.

c. Contested Operating Expense Adjustments.

i. Labor Expense. Petitioner proposed to adjust labor expense by an increase of $559,234. The OUCC proposed adjustment of $540,045. The difference of $19,189 relates to Petitioner's inclusion of one additional employee at the Customer Service Center ("CSC") which would increase to 26 the number of permanent employees working at that facility. OUCC witness P. Sue Haase testified that her review of employment history showed that the CSC has only reached 25 employees during one month since June 1996. She testified that during the same period, Petitioner had experienced an average of 1.75 vacancies based upon a full complement of 25 employees. She alleged that Petitioner had "over collected" due to these vacancies since labor costs for 25 CSC employees were reflected in the last rate case. In conjunction with Ms. Haase's position, the OUCC also reduced group insurance (by $6,315) and payroll taxes (by $1,538).

Petitioner's Vice President and Treasurer, Christine J. Doron, testified in rebuttal that past vacancies resulted from different

employees leaving at different times. Petitioner hired over 10 new employees for the CSC in 1996-97 and has 14 with less than three years of service. The vacancies in Ms. Doron's view are the result of a high turnover rate resulting from the nature of customer service work. She testified that Petitioner's approach is to bring in new employees through a temporary agency so that performance can be evaluated before they are hired as permanent employees. Ms. Doron testified that when the temporary employees are considered, Petitioner many times had far more than 26 individuals working at the CSC. Ms. Doron testified that as of July 8, 1997, Petitioner had 25 full-time employees, 3 temporary workers, and 8 more temporary workers starting July 10, 1997. Ms. Doron explained that Petitioner intended to make one of the current pool of temporary employees a full time employee as soon as training and evaluation were complete. This will bring the total permanent employee level to 26 within the adjustment period. (Petitioner's Ex. CJD-R, pp. 5-6.)

We find Petitioner's proposed adjustment reflects a fixed, known and measurable change occurring within twelve months of the test year. We therefore find that Petitioner's proposed adjustment to increase labor expense by $559,234 should be accepted. We reject the OUCC's proposed adjustment to labor costs and its proposed elimination of the new CSC employee from group insurance expense and payroll taxes.

ii. Customer Accounting Expense. Petitioner proposed an adjustment to decrease customer accounting expense at pro forma present rates by a total of $54,037. This consisted of adjusting uncollectible expense at present rates to reflect a three-year average write-off percentage and eliminating certain telephone expenses in Johnson County and Wabash. (Petitioner's Ex. MGT-1, Sch. 1, p. 1, line 15.)

Ms. Haase proposed that customer accounting expense be decreased by $136,152. Ms. Haase testified that the entire classification of this expense had decreased after the close of the test year. Ms. Haase annualized the level of customer accounting expense incurred during the seven months following the close of the test year and used this figure as her pro forma expense level. Ms. Haase testified that her proposed adjustment was consistent with evidence from Petitioner's last rate case regarding cost savings from the consolidation and merger of Indiana-American and Indiana

Cities. On cross-examination, Ms. Haase admitted that the merger and consolidation had occurred before the test year began.

On rebuttal, Mr. Cutshaw opposed Ms. Haase's position. He testified that her adjustment violates the terms of the Prehearing Conference Order because it does not reflect a fixed, known and measurable change within twelve months following the test year. He testified that her analysis consisted of comparing the annualized expense during seven months following the test year to the test year and sending a data request asking why no adjustment had been made. He testified that she made her adjustment based upon non-specific information and she had not identified any change justifying her adjustment. (Petitioner's Ex. JLC-R, pp. 11-15.)

The OUCC is the party proposing an adjustment, and so the burden is on the OUCC. As we stated in an earlier Indiana-American rate case:

> If it seeks to eliminate test year expenses the burden is on the OUCC to show a fixed, measurable and known change occurring within twelve months of the test year. "The actual test year expenses of a utility are presumed to be reasonable and if a party challenges such expenses, that party has the burden of proving that its adjustment is reasonable."

Indiana-American Water Co., Cause No. 39215 (IURC 5/27/92), p. 12; Indiana Cities Water Corp., Cause No. 38851 (IURC 8/8/90), pp. 3-4.

Ms. Haase suggests she is adjusting for cost savings as a result of the acquisition of Indiana Cities and its merger into Indiana-American. The acquisition occurred in 1993 and the merger occurred on January 1, 1995. Savings from the acquisition and merger were reflected in the last rate case and are again reflected in this case. Any further adjustments would be governed by the Prehearing Conference Order. Ms. Haase is merely adjusting for an unexplained difference in the level of expense which has not been attributed to any change in operations. Ms. Haase's adjustment is no different in methodology from a proposed adjustment we rejected in our Order in Southern Ind. Gas & Elec. Co., Cause Nos. 39871 and 40078 (IURC 6/21/95). There, the petitioner proposed to adjust maintenance expenses upward to reflect an inflation adjusted five-

year average amount. The use of an average was requested because of wide fluctuations in the expense level and was justified because during the twelve months following the test year, the level of expense had grown substantially. We rejected the proposed adjustment and stated:

> We find that the data from the test year ending December 31, 1993 agreed to by the Parties and approved by the Commission in the Prehearing Conference Order on May 11, 1994, is sufficiently recent to be representative of non-payroll maintenance expenses from the perspective of inflation.
>
> . . . The fact that certain expenses are highly volatile or subject to wide variation does not in and of itself mean that the level of expenses actually experienced in the test year are not representative.

Id., p. 39.

The OUCC's proposed adjustment is merely the mirror image of the adjustment we rejected in SIGECO. It is inconsistent with the concept of the test year to adjust one item of expense without proof of a change rendering the test year level unrepresentative. We find that Ms. Haase's proposed adjustment should be rejected and a decrease of $54,037 should be accepted.

iii. Miscellaneous Expenses. Petitioner made adjustments in its case-in-chief which had the overall effect of decreasing miscellaneous expenses. (Petitioner's Ex. MLG-1, Sch. 8.) The OUCC proposed disallowing $192,941 in additional expenses over and above the adjustment made by Petitioner. Of this amount, Petitioner in rebuttal did not oppose eliminating $72,702 of this amount but did object to elimination of the remaining $120,239. The expenses in dispute can be broken down into the following general categories:

a. Employee benefits.
b. Meeting and training expenses.
c. Water quality supply expenses.
d. Severance pay.

e. Lobbying.
f. Advertising expenses.
g. Automobile repairs.

a. Employee Benefits. Ms. Haase proposed disallowing certain expenses she claimed were incurred to entertain employees who already receive a salary. Mr. Thornburg opposed this adjustment. He testified the expenses totaling $37,838 relate to important and legitimate employee recognition and service functions. The amounts at issue are retirement luncheons ($1,220), employee service awards ($15,817), employee recognition functions ($15,304) and employee fruit baskets ($5,497). Mr. Thornburg testified the retirement luncheons are modest affairs consisting of sandwiches, soft drinks and desert. Service awards are given to employees who achieve five year milestones. Employee recognition dinners, held once a year, acknowledge perfect attendance, employee safety, and other significant achievements. Mr. Thornburg testified these benefits accrue to the customers in terms of lower costs and better service. In Mr. Thornburg's view, the expenses are modest (an average of $145.53 per employee), and these practices are prevalent throughout a broad spectrum of businesses. He testified these types of expenses were approved in Indiana-American's last rate case. (Petitioner's Ex. EWT-R, pp. 8-9.)

In Indiana-American's last rate case, we addressed the OUCC's challenge to precisely the same type of service and safety program costs challenged by Ms. Haase. In that case, the total amount of such expenses was slightly higher (by about $1,000) than the amount at issue in this case. There, we found:

> [T]he resources expended to prove an expense item should never exceed the value of the expense item itself, and should always be congruous with the materiality of the expense item relative to the totality of expenses being considered. . . . We know that analyses to evaluate the effectiveness of these types of programs can be difficult to formulate and expensive to monitor, and are often more subjective than objective. For these reasons, the cost of demonstrating their worthiness and reasonableness for inclusion in rates can often exceed their absolute value, and their value relative to more significant items in the rate case. We are also aware that the magnitude of expenses for service and safety programs relative to

> total expenses for operation and maintenance are less than one percent of the total, and therefore immaterial. These programs were accepted in Petitioner's previous rate proceeding, and we are persuaded to accept them in this rate case as well.
>
> The Commission does caution the Petitioner against combining incompatible accounts into a single sum in the future, however. Service awards can certainly be viewed as part of a compensation package. Conversely, they can be perceived as gifts, which are not related to the delivery of utility services. Fortunately, the sum of the two accounts was deminimus and had no material effect on rates in this instance. <u>If these accounts increase in magnitude and materiality in the future, however, it may become necessary to examine each individually</u>.

p. 18 (emphasis added).

Everything we said then applies equally today. The amount of these costs is relatively <u>de minimus</u>. Thornburg testified as to the positive effects of the programs. It would be inconsistent to deny recovery in this case when the amount at issue is less than the amount we found to be reasonable in that case. We find these employee benefit expenses are properly recoverable in rates and therefore reject Ms. Haase's proposed adjustment.

b. <u>Meeting and Training Expenses</u>. Ms. Haase proposed to disallow various employee meeting expenses inclusive of meals. Mr. Thornburg in rebuttal testified the total expenses at issue are $3,412, consisting of the following items: meeting room rentals ($2,328), name tags ($212), lunches ($122), and a company address book ($750). He testified that meeting room rentals are necessary because many of the operations are small and do not have facilities needed for holding meetings. Permanent name tags have been procured so as to avoid the expense of disposable name tags. The address book is so employees can be contacted after hours in the event of an emergency or other need. The lunches relate to meetings that extend past the lunch hour. (<u>Petitioner's Ex. EWT-R</u>, pp. 9-10, 15.) In addition, Ms. Haase proposed the disallowance of $131 for a luncheon while conducting Defensive Driving Training. We find that Mr. Thornburg's explanation for these expenses is reasonable, especially given their magnitude. We find <u>they</u> should

be recovered through rates and therefore reject Ms. Haase's adjustment.

Also included within this category is the cost of Petitioner's Board of Directors and VIP Dinner in Southern Indiana, which totaled $6,700. Mr. Thornburg testified that this served as a community education event to share with elected officials, business leaders, and community representatives the issues surrounding the water supply needs there. He testified the purpose behind the event was to obtain input from the community relating to the Southern Indiana project. (Petitioner's Ex. EWT-R, p. 10.)

We find this expense to be inappropriate for ratemaking purposes. The expense appears rather excessive for one dinner, and we find it should not be recovered in rates and therefore accept Ms. Haase's proposed adjustment.

c. Water Quality and Supply Expenses. Ms. Adams opposed the recovery of various expenses related to water quality and supply. The first such item related to lime feed improvement costs totaling $16,511. (Petitioner's Ex. 2, Attach. PSH-3, p. 7.) She testified these were incurred as part of an engineering study. Since changes in the Safe Drinking Water Act ("SDWA") made lime feed nonviable, she contended these improvements are not used and useful and the expense nonrecurring. The second item opposed by Ms. Adams relates to the costs of a contamination investigation in Jeffersonville totaling $14,957. She claimed that Petitioner was unable to pinpoint the source of contamination and that the bacterial levels returned to normal on their own. Ms. Adams claimed the expense was nonrecurring. Ms. Adams also opposed the recovery of $21,776 for a filter and associated materials that have been reclassified and set aside for future use. She claimed it is unlikely Petitioner will discard a filter every year and that the expense should be disallowed. Finally, Ms. Adams opposed the recovery of $1,010 which related to a well site survey in the Marlin Wellfield. Ms. Adams testified that Petitioner determined that the White River East Wellfield was a better site and so the Marlin Wellfield option was not pursued. She testified the survey costs were nonrecurring.

Mr. Thornburg opposed Ms. Adams' various adjustments. He stated the lime feed system was being investigated and studied when new water quality standards coupled with the information learned in the study made it wise to pursue another course. This was simply

a matter of adapting to changes as new information becomes available. As to the contamination investigation, Mr. Thornburg testified that the State of Indiana has adopted wellhead protection regulations that are going to cause the level of expense for contamination investigations to increase. Indeed, he testified that contamination investigations are ongoing presently in Kokomo, Sullivan, and Jeffersonville. That the problem was not found before it disappeared on its own does not change that the fact that Petitioner had a duty to investigate and it cost money to do so. As to the filter, Mr. Thornburg testified that the filter was inadvertently written off and now it serves an important reliability component as a temporary treatment system that can be moved around from place to place and, if not treated as an expense, should be included in the corporate rate base. As to the well site survey, the results demonstrated that a different wellfield would provide higher yields. He testified that well site surveys are an ongoing cost of doing business. (Petitioner's Ex. EWT-R, pp. 11-13.)

We find all of these expenses except for the $21,776 filter and associated materials are recoverable as recurring and ongoing expenses. In that vein, they are much like the acquisition investigation expenses we discussed in PSI Energy, Inc., Cause No. 40003, (IURC 9/27/96). Although PSI did not oppose the OUCC's adjustment in that case, we noted that, "[w]e tend to agree with PSI that the investigation of mergers and acquisitions is of a recurring nature today. We also agree that it would be inequitable to categorically reject all costs associated with unconsummated projects while at the same time ensuring that customers receive the lion's share of benefits associated with the consummated projects." (Order, pp. 80-81.) Like the merger investigation costs, the costs of investigating better ways to treat the water, investigating wellfield contamination events, and surveying alternatives for new sources of supply are recurring expenses. Customers receive the benefits of the best and most efficient way to deliver potable water to their homes. It would be inequitable to deny recovery of the costs of investigating the rejected alternatives, when such costs must be incurred for the utility to make its informed decisions. See, also Switzerland County Nat. Gas Co., Cause No. 39291 (IURC 7/22/92) (construction feasibility study found to be recurring and recoverable). We find that Ms. Adams' proposed adjustments should be rejected except for the filter and associated

materials. The expensing of an unused filter is hopefully an oversight of Petitioner that will not be recurring.

d. Severance Pay. Ms. Haase proposed disallowing $11,279 of the test year severance pay expense of $16,546. In her opinion, the test year amount was abnormally high. She compared the test year amount to the severance pay expense reflected in Indiana-American's last rate case. She proposed to include in this case $5,267 for this expense, based upon a 3.5 year average of severance pay, excluding severances relating to the acquisition of Indiana Cities.

Mr. Thornburg opposed the adjustment. He testified the test year severance pay amount was paid to a long-time employee pursuant to a collective bargaining agreement. He testified that recurring displacement of employees and severance pay would occur on a going forward basis. He stated that nothing in the last rate order or the testimony in that case suggested higher levels of this expense will not occur. As an alternative to Ms. Haase's proposed disallowance, Mr. Thornburg suggested that if the Commission determines an adjustment should be made, a better methodology would be to amortize the disputed amount over the anticipated life of the rates in this case, or twenty months, resulting in a total adjustment of $6,618. (Petitioner's Ex. EWT-R, pp. 13-14.)

We find that this expense should be based upon the historical average of severance pay, and the test year amount should be decreased by $11,279.

e. Lobbying Expenses. Ms. Haase proposed to disallow $1,019 in lobbying expenses. Mr. Thornburg testified this represented the portion of annual dues to two Chambers of Commerce allocated by those organizations to lobbying. (Petitioner's Ex. EWT-R, pp. 14-15.) We find Ms. Haase's proposed adjustment should be accepted.

f. Advertising Expenses. Ms. Haase recommended that the Commission deny Petitioner's proposed recovery through rates of $750 in advertising expenses for company address books. Petitioner presented evidence that the address books are used internally. Due to the deminimus nature of the expense, the Commission rejects Ms. Hasse's recommendation.

g. Automobile Repairs. Ms. Haase proposed that $5,615 in automobile repairs that were expensed during the test year should have been capitalized because they extended the life of these assets. Mr. Thornburg opposed this because of the administrative burden of capitalizing a transmission repair, brake shoes or new tires. (Petitioner's Ex. EWT-R, pp. 15-16.) We agree that, given the magnitude of the amount and the nature of the expense, Ms. Haase's adjustment should be rejected.

iv. Amortization of Acquisition Adjustment. As previously discussed and consistent with the 1996 Rate Order, we will not include in operating expenses any amortization of the 1993 acquisition adjustment.

v. Depreciation Expense. Depreciation expense shall be computed on the depreciable property included in rate base using the depreciation accrual rates previously approved.

vi. Interest Synchronization. For purposes of computing Petitioner's income tax expense, both Petitioner and the OUCC computed the interest expense deduction by multiplying the weighted cost of debt by the original cost rate base excluding the 1993 acquisition adjustment. OUCC witness Gassert argued, however, "if the Commission adopts Petitioner's proposal to receive an original cost return on the acquisition adjustment," the 1993 acquisition adjustment should be included in the interest synchronization calculation.

Mr. Cutshaw testified that Petitioner's interest synchronization procedure is consistent with the 1996 Rate Order in which the customers did not bear the amortization expense for the 1993 acquisition adjustment and the Company is able to retain the tax benefit of the interest on the debt used to finance the purchase price. He disputed Mr. Gassert's claim that Petitioner has proposed an "original cost return." Instead, Petitioner has proposed a method which is fully consistent with the 1996 Rate Order in which the 1993 acquisition adjustment is included in the fair value rate base but not the original cost rate base. On cross-examination, Mr. Gassert agreed that in the 1996 Rate Order interest synchronization was applied precisely as the Company has in this case.

We find that Petitioner's interest synchronization method is consistent with the 1996 Rate Order and should be approved. We have not allowed Petitioner to amortize the acquisition adjustment as an above-the-line expense. Moreover, the 1993 acquisition adjustment is included in the fair value rate base but not the original cost rate base to which interest synchronization applies. Therefore, the acquisition adjustment should not be included in the interest synchronization calculation.

J. Net Operating Income At Present Rates. Based upon the evidence and the determinations made above, we find that Petitioner's adjusted operating results under its present rates are as follows:

Operating Revenues:	$61,260,148
Operating Expenses:	
- O&M Expenses	24,528,031
- Depreciation Expense	9,839,896
- Amortization Expense	262,351
- Taxes Other than Income	5,740,096
- State Income Tax	752,135
- Federal Income Tax	3,576,603
Total Operating Expenses:	$44,699,112
Net Operating Income:	$16,561,036

In summary, we find that with appropriate adjustments for ratemaking purposes, Petitioner's annual net operating income under its present rates for water service would be $16,561,036. We have previously found that the fair value of Indiana-American's utility property is approximately $311,804,823. A return of $16,561,036 represents a rate of return of 5.31% on the fair value rate base. We find that this opportunity is insufficient to represent a reasonable return. We therefore find that Petitioner's present rates are unreasonable and confiscatory.

K. Authorized Rate Increase. On the basis of the evidence presented in these proceedings (and subject to our later findings on rate design and the Wabash settlement), we find that Petitioner should be authorized to increase its rates and charges to produce additional operating revenue of $6,100,914 or 9.96%, resulting in

total annual revenue of $67,361,062. This revenue is reasonably estimated to allow Petitioner the opportunity to earn net operating income of $20,262,716. The Commission finds that rates estimated to produce this level of revenues would be just and fair and should allow Petitioner the opportunity to earn a fair rate of return on the fair value of its property dedicated to providing water and sewer service to the public. Petitioner's operating results under pro forma rates are described as follows:

	TOTAL	CRAWFORDSVILLE	JOHNSON CO	SOUTHERN IND
Operating Revenues	$67,361,062	$2,197,988	$7,637,981	$9,227,557
Less Deductions				
- Operation & Maintenance	24,562,499	773,758	2,215,464	4,128,396
- Depreciation	9,839,896	459,128	1,523,411	1,097,004
- Amortization	262,351	7,999	27,680	24,822
- General Taxes	5,820,126	213,749	623,913	747,423
- State Income Taxes	1,023,231	20,872	104,046	131,428
- Federal Income Taxes	5,590,243	74,506	537,225	739,233
Total Deductions	47,098,346	1,550,012	5,031,739	6,868,306
Pro-Forma Operating Income	$20,262,716	$ 647,976	$2,606,242	$2,359,251

	KOKOMO	MUNCIE SEWER	MUNCIE WATER	NEWBURGH
Operating Revenues	$10,810,607	$ 97,163	$9,915,633	$1,370,632
Less Deductions				
- Operation & Maintenance	3,215,664	51,149	3,651,242	696,536
- Depreciation	1,664,132	6,020	1,183,396	174,145
- Amortization	87,250	1,182	20,163	3,627
- General Taxes	835,733	7,064	1,073,379	101,732
- State Income Taxes	178,158	1,522	169,165	14,841
- Federal Income Taxes	1,019,946	8,968	882,601	77,354
Total Deductions	7,000,883	75,905	6,979,946	1,068,235
Pro-Forma Operating Income	$ 3,809,724	$ 21,258	$2,935,687	$ 302,397

	NOBLESVILLE	RICHMOND	SEYMOUR	SHELBYVILLE
Operating Revenues	$ 2,267,764	$6,365,905	$2,846,583	$2,466,690
Less Deductions				
- Operation & Maintenance	582,218	2,543,866	1,146,464	866,689
- Depreciation	521,763	739,896	401,805	375,775
- Amortization	6,855	11,529	15,280	4,213
- General Taxes	289,162	568,302	159,700	156,289
- State Income Taxes	28,153	105,022	41,000	43,333
- Federal Income Taxes	101,154	595,419	256,430	269,990
Total Deductions	1,529,305	4,564,034	2,020,679	1,716,289
Pro-Forma Operating Income	$ 738,459	$1,801,871	$ 825,904	$ 750,401

	SOMERSET SEWER	SOMERSET WATER	SUMMITVILLE	WABASH
Operating Revenues	$ 43,413	$ 27,665	$ 140,132	$1,407,080
Less Deductions				
- Operation & Maintenance	31,945	26,810	99,835	691,070
- Depreciation	5,224	6,232	12,643	182,601
- Amortization	0	73	305	3,383
- General Taxes	2,878	2,730	11,119	100,447
- State Income Taxes	83	(357)	556	18,423
- Federal Income Taxes	(270)	(3,467)	1,746	104,805
Total Deductions	39,860	32,021	126,204	1,100,729
Pro-Forma Operating Income	$ 3,553	$ (4,356)	$ 13,928	$ 306,351

	WABASH VALLEY
Operating Revenues	$10,538,269
Less Deductions	
- Operation & Maintenance	3,841,393
- Depreciation	1,486,721
- Amortization	47,990
- General Taxes	926,506
- State Income Taxes	166,986
- Federal Income Taxes	924,603
Total Deductions	7,394,199
Pro-Forma Operating Income	$ 3,144,070

These determinations reflect the effect of additional revenue on income taxes, the gross receipts tax, the IURC fee and uncollectible accounts consistent with the gross revenue conversion factor shown on Petitioner's Ex. JLC-1, Sch. 3 and Public's Ex. 1, Sch. 1, p. 3.

11. Method of Implementing Rate Increase. As noted previously, Petitioner originally proposed to implement its rate increase by consolidating its current fourteen separate water rate schedules into four rate groups for general water service and three rate groups each for public and private fire service in a phased approach toward single tariff pricing ("STP"). (Petitioner's Ex. JFG-5, Sch. 3.) Petitioner proposed to retain two separate rate groups for sewer service but move the sewer rates closer to STP.

Mr. Guastella conducted cost of service studies on a total company basis and separately for each of Petitioner's local operations. He used the base-extra capacity method under which the Company's revenue requirement components are functionalized

according to the design and operation of the system. Then the functionalized costs are allocated to each customer class according to their usage and demand characteristics and other factors which establish the cost responsibility of each customer class.

OUCC witness Michal stated that he had reviewed Petitioner's individual operation cost of service studies and had "only a few minor corrections and clarifications." (Public's Ex. 4, p. 14.) Mr. Michal stated that he thought (a) the ratio of maximum day to average day in the Crawfordsville study should be 1.3, rather than 1.5 as used by Mr. Guastella, (b) revenue generated from reconnection charges and returned check fees should be allocated to the functional allocation factor identified in the studies as Code 6 (the Customer function) rather than Code 12, (c) Petitioner inadvertently miscalculated Code 21 (costs related to rate base) by adding instead of deducting amortization, depreciation, CIAC and customer advances, and (d) the descriptions for Codes 32, 33, 34 and 35 should be corrected to conform to a revised page 9 of Petitioner's Ex. JFG-2, Sch. 1, which was attached to Mr. Michal's testimony as Attachment 13. (Public's Ex. 4, pp.15-16.) We accept the latter document (Attachment 13) as a correction to Mr. Guastella's cost of service study code descriptions. Since Mr. Michal did not provide revised cost of service results incorporating the other suggested changes, we are unable to implement them at this time. Since Mr. Michal described these suggested changes as minor, we find that Mr. Guastella's cost of service studies are acceptable for the purpose of designing rates in this Cause. We will now turn to the issue of whether Petitioner's modified STP proposal should be adopted in whole or in part or whether rates should continue to be calculated separately for each of the existing local operations ("individual operation pricing").

Mr. Guastella defined STP as a single rate structure applicable to all customers regardless of their geographic location. Mr. Guastella stated that in recent years STP has been increasingly recognized as a preferable pricing concept for functionally-integrated water utilities that serve multiple communities, regardless of whether the various operations are physically interconnected. This acceptance of single tariff pricing has occurred mainly due to the realization that a larger revenue base will provide better rate stability for all customers of the consolidated unit. Over time, each of a utility's

operations will require significant capital additions. Without STP, these projects can lead to price spikes and rate shock. With STP, the costs are spread over the Company's entire customer base and the effect on prices is much more gradual. In addition, for companies like Indiana-American, many operational and financial activities are already in fact centralized. As a result, common costs must be allocated in some manner to individual operations. Thus, the concept that each community is a separate cost center is increasingly fictitious. For example, capital requirements are met on a total-company basis, not by individual operation. When Indiana-American issues debt to finance construction projects, the debt requirements are combined on a total-company basis, debt is issued on a total-company basis and the debt is secured by utility property in all operations. Numerous operating activities are also provided on a centralized basis. Mr. Guastella stated that while separate costs of service can be computed for each operation (and have been in his individual studies), the results are largely dependent on the allocation of commonly-incurred costs based upon a formula. Mr. Guastella testified that STP has also been accepted because of the basic notion that people should pay the same amount for the same service. Mr. Guastella testified that since Indiana-American's service in each operation is essentially the same, STP is a fair and reasonable approach for establishing Petitioner's rates. (Petitioner's Ex. JFG, pp. 26-29.)

Mr. Guastella also addressed the issue of whether STP is cost-based. Mr. Guastella indicated that a cost-based rate design need not differentiate based on geography. Mr. Guastella noted that many of Petitioner's customers throughout the State receive electric, gas, and telephone service through hundreds of miles of lines, cables, mains and towers that have been installed to connect those customers to the source of supply. These customers pay rates which apply regardless of where the customer is located. Mr. Guastella also stated cost averaging is utilized in designing rates for water service within interconnected systems without regard to customer location. For example, customers close to the source of supply pay the same rates as customers farther away even though the cost of serving those customers is different. Likewise, new customers pay the same rate as existing customers. Mr. Guastella said traditional ratemaking principles recognize that rates are reasonable if they are not unduly discriminatory. He described STP as another cost averaging process which appropriately reflects the costs of serving all customers of a functionally-integrated

utility. Mr. Guastella testified that there are many points along the spectrum between totally cost-based rates for each individual customer and rates that are not based on cost at all. STP is a point along the spectrum, which is not necessarily farther away from the cost-based rate than the Company's existing rate design. (Id., pp. 31-36.)

Mr. Guastella further stated that over a two-to-five year time frame, all of Petitioner's operations have installed or will install substantial improvements increasing their respective net utility plant in service from 39% to 229%. (Petitioner's Ex. JFG, pp. 37-38.) Mr. Guastella's testimony was supported by Petitioner's witness Alan DeBoy who provided Petitioner's 10-year construction forecast which demonstrated that during the next few years, each of Indiana-American's operations will need improvements requiring significant capital expenditures. The capital budget does not include small routine projects like main extensions, main replacements, new services, etc. (Tr., p. C-87). Petitioner's 10-year construction forecast shows that Petitioner is planning to install at least the equivalent of a "major project" under the MSFRs in one or more of the operations in each of the next ten years. Mr. DeBoy testified that STP will alleviate rate spikes at all of the local operations. (Petitioner's Ex. AJD, pp. 14-17; Petitioner's Ex. AJD-1.)

Besides promoting rate stability, Mr. Guastella also outlined other benefits of STP including reducing complexity of billing, simplifying training of service representatives, reducing the time spent dealing with customers, simplifying the preparation of budget forecasts, and simplifying the preparation of rate cases. In addition, STP will help bring utility service to more customers living in rural areas who need the service for sanitary reasons or economic development and will provide incentives for larger utilities to acquire smaller troubled utilities. He noted that in rural areas, farm chemicals, livestock operations, or failing septic systems often can render private water supplies unhealthy. With STP, utilities can provide this necessary service at affordable rates -- rates that would not be available from a stand-alone utility. (Petitioner's Ex. JFG, pp. 38-39.)

Mr. Guastella also challenged the notion that individual operation pricing represents the stand-alone costs of the various operations because results can be dramatically different depending

on the method used to allocate common costs. Mr. Guastella analyzed two different methods of allocating common costs. First, he compared STP revenues to the individual operation cost of service using the Company's existing method of allocating corporate costs based on the number of customers in each operation (the "Company Allocation Method"). The second analysis compared STP revenues to the individual operation cost of service using a method of allocating common costs which Mr. Guastella considered more representative of the true stand-alone costs of each operation (the "Guastella Allocation Method"). The Guastella Allocation Method allocates common costs based on the number of operations. For instance, if a corporate employee earns $60,000 per year, the Company Allocation Method would allocate $114 or 0.17% to the Somerset water operation. Under the Guastella Allocation Method, $4,286 of the employee's salary would be allocated to Somerset. As a further refinement, he adjusted the overall cost of capital to be progressively higher for the smaller systems. Mr. Guastella's analysis showed that under the Guastella Allocation Method the smaller systems would have significantly greater increases than under the Company's current rate design. Mr. Guastella testified that he is not advocating a departure from the Company's Allocation Method. Indeed, he prefers it for purposes of rate design because it achieves a result closer to STP. However, Mr. Guastella testified the Guastella Allocation Method shows the Company's existing rate design is not (and should not be) a proxy for a stand-alone rate design.

Mr. Guastella testified that Petitioner's modified STP proposal was intended to result in percentage increases among the various operations that are less dramatic than would result from either full STP or individual operation pricing. The first step in developing the proposed rates for general water service was to identify operations which would receive a decrease or small increase under full STP. For those operations, decreases were eliminated (with the exception of the very small operations whose typical bills would be above-average despite an overall revenue decrease) and the increases were limited so that they would not exceed the overall average increase. These operations are Kokomo, Seymour, Somerset and Summitville. Noblesville was also included in this group. Next, Group 2 rates were established at about the level of full STP for Muncie, Richmond, Wabash Valley, and Johnson County. The remaining operations became Group 3, with the exception of Southern Indiana and Wabash, which required a lower

rate because their existing rates are the farthest below STP rates. Therefore, Southern Indiana and Wabash were placed in Group 4. Pursuant to the Settlement Agreement with Wabash which was subsequently filed, Wabash would be separated from Southern Indiana and placed in a new Group 5.

Petitioner's proposed general water service rates for the four original Rate Groups are shown on Petitioner's Ex. JFG-5, Sch. 3, p. 1. Sales for resale rates for Johnson County and Southern Indiana were adjusted in order to mitigate the impact on certain resale customers. Mr. Guastella stated that Petitioner's proposal would move all operations toward STP. The same approach was followed for private fire service and for public fire service. Petitioner proposed gradualizing the move toward STP for private and public fire service by establishing three different rate groups for each. Petitioner's rate groups and proposed rates for private and public fire service are shown on Petitioner's Ex. JFG-5, Sch. 3, p.2. Mr. Guastella performed the same analyses for the two sewer operations and proposed sewer rates that reflected a phased approach toward STP. Petitioner's proposed sewer rates are shown on Petitioner's Ex. JFG-6, Sch. 1.

Petitioner also presented the testimony of Dr. Janice A. Beecher, who serves on numerous committees of the American Water Works Association. She has prepared a draft report on STP for the United States Environmental Protection Agreement and has testified on behalf of the Florida Public Service Commission Staff on STP. She provided a general discussion of STP and the results of a recent national survey on STP for water utilities. (Petitioner's Ex. BEE, pp. 6-10.)

Dr. Beecher testified that the predominant method in the nation for deciding STP policy issues is on a case-by-case basis. Some commissions have explicitly encouraged the movement towards STP and others have found STP to be in the public interest when presented with specific STP proposals. Dr. Beecher said that the literature on public utility economics and ratemaking sheds little light on STP because it considers mainly the economic characteristics of the telecommunications and energy industries. While geographic cost differences were an issue in the adolescent years of these utilities, today, the issue has been eclipsed for those industries by the trend toward competitive pricing. Competition places a greater emphasis on overall efficiency as a

determinant of price levels, rather than allocating costs according to spatial or other ratemaking criteria. Dr. Beecher testified that whether to adopt STP is a policy question that must recognize the public policy concerns involved. (Id., pp. 17-18, 22-24.) She expressed the opinion that economic efficiency is a goal, but not the only goal of utility pricing. She said utility pricing must strike a delicate balance between the interests of the utility and the customers and so that the public interest can be served.

Dr. Beecher presented the results of a survey of staff members of all state public utility commissions with jurisdiction over water utilities regarding the issue of STP. Of these results, she said it was most accurate to evaluate commission policy by looking at states with multiple-system water utilities where the STP issue has been considered. After eliminating states where the commissions have no jurisdiction over water utilities, where there are no multi-system water utilities and where STP has never been considered, 24 states remain. (Petitioner's Ex. BEE-9.) Of these, (a) eight commission have generally accepted STP and (b) ten commissions have approved STP on a case-by-case basis. Of the remaining states only two (Indiana and Vermont) have rejected STP proposals. (Petitioner's Ex. 16.) Although the Indiana Commission in Petitioner's 1994 rate Order rejected a full STP proposal "at this time," it had previously approved STP for Petitioner's Terre Haute and Sullivan operations which are not interconnected. Of the remaining four states, STP had not been an issue in two states and partial consolidations without full STP had been approved in two other states. (Petitioner's Ex. BEE-9.) Dr. Beecher presented the most common reasons cited by staff members in favor of and opposed to STP. The most common cited reason in favor of STP is mitigation of rate shock and the most common cited reason against STP is conflict with cost-of-service principles. (Id., pp. 38-49.)

Dr. Boquist addressed certain economics issues involving STP. He testified that geographic pricing does not have any inherent advantage in terms of economic efficiency over STP. He noted that in competitive markets, where prices should be driven to the economically efficient price, geographic differences in costs and investment usually have little to do with prices. As Dr. Boquist pointed out, General Motors does not charge a different price for Chevrolets based on the costs of the plant where the automobile was manufactured. Nor does Newsweek charge different prices based on the plant that printed the magazine. Dr. Boquist stated that while

in a regulated environment a process can be developed to allocate costs geographically, that process is simply an accounting construct and does not necessarily represent true economic costs. In economic theory, efficient pricing is based upon long-run marginal costs. Since geographic pricing does not reflect long-run marginal cost, it should not be favored over STP on the theory that it is more economically efficient. (Petitioner's Ex. JAB, pp. 67-72.)

Dr. Boquist said while individual operation pricing rates are sometimes referred to as "stand-alone" rates, they rarely attempt to allocate costs based on what it would cost to operate each local operation as a separate independent unit. Dr. Boquist further testified that even if stand-alone costs were used to allocate common costs, the resulting rates would still not be stand-alone rates because the consolidation of several operations into a larger whole will create economies of scale that will reduce the overall cost of running the total business. Under individual operation pricing, some manner must be devised to allocate these savings to the local operations.

Dr. Boquist also testified that STP, by bringing more affordable rates to rural areas, encourages economic development and the efficient operation of water utilities. (Id., pp. 80-82.) Dr. Boquist testified that customers are already accustomed to the idea of STP because STP is the standard method of pricing electric, gas and telephone services. Dr. Boquist asserted that interconnection should not be the controlling criteria for STP. He first noted that it should not automatically be assumed that STP for other types of utilities arose from interconnection -- the degree of interconnection in electric, telephone, and gas service may be the result of STP rather than vice versa. In any event, these other utilities have geographic differences in costs despite interconnection, differences which are disregarded in rate design.

The OUCC opposed Petitioner's proposal to move toward STP. OUCC witness James A. Holbrook contended that rates should continue to be set separately for each operation. Mr. Holbrook said that STP is not a "pareto improvement," is not consistent with cost causation, does not result in more affordable rates, creates unwarranted subsidies, and is not in the best interest of all of Petitioner's customers. Mr. Holbrook analyzed Petitioner's 10-year construction forecast presented by Mr. DeBoy and computed an

increase in per meter revenue requirements over this period due to the capital improvements included in the forecast on both an individual operation basis and on a STP basis. He noted that during this ten year time frame some operations would experience greater increases and some operations would experience lower increases under full STP than they would with individual operation pricing. He contended these differences were subsidies. He testified that a move toward STP should not be approved unless at least one person benefits from the change without making anyone else worse off, a concept he labeled pareto improvement. Mr. Holbrook claimed changing to STP does not present a pareto improvement and therefore should be rejected. On cross-examination Mr. Holbrook stated that he was not aware of any rate design method which satisfied the standard for pareto optimality.

Mr. Holbrook used the Wabash operation as an example to demonstrate his concerns. He testified that under the Company's present rate design, the average Wabash residential customer would pay $13.17 per month, but would pay $14.51 per month under Petitioner's originally proposed modified STP rates. He testified that based on the ten-year construction forecast, Wabash (along with Wabash Valley, Seymour and Muncie) would pay more under STP than under the present rate design during that entire period. During the hearing, the OUCC elicited certain remarks of witnesses through cross-examination to the effect that the town of Wabash had threatened to take over the Wabash operation through eminent domain proceedings if Petitioner's STP proposal were approved.

On rebuttal, Mr. Guastella disputed Mr. Holbrook's calculation of per meter revenue requirements attributable to capital improvements. First, Mr. Holbrook's analysis includes components that are already in rate base. Second, Mr. Holbrook failed to consider depreciation and property taxes. Third, Mr. Holbrook did not consider retirements. Fourth, Mr. Holbrook's income tax gross-up factor incorrectly assumes that the improvements will be financed entirely with equity and no debt. Fifth, Mr. Holbrook only considered the budgeted major capital improvements and not other capital expenditures. Finally, Mr. Holbrook used the number of meters without adjustment for size, customer class, or consumption. Having corrected these errors, Mr. Guastella concluded the analysis is still faulty because it compares individual operation pricing to full STP rather than the Company's phased approach toward STP. Mr. Guastella also said it too

simplistic to allocate capital costs on a flat per meter basis. Even with these problems, Mr. Guastella testified the analysis demonstrates that STP is in the best interests of all customers. Even Mr. Holbrook's method of analysis shows STP provides gradual increases over time as compared to the dramatic swings on an individual operation pricing basis. (Petitioner's Ex. JFG-R, pp. 8-13.)

Mr. Guastella also disputed Mr. Holbrook's discussion of Pareto improvement as a test for rate design. Mr. Guastella stated that since rate design changes necessarily shift equal dollar amounts from some operations (or customers) to other operations (or customers), Mr. Holbrook's pareto improvement test for a change in rate design could never be satisfied. (Id., p. 14.) This test would merely perpetuate the status quo.

Mr. Guastella also claimed that Mr. Holbrook has misused the term "subsidy." To label differences between STP (or modified STP) and the present rate design as "subsidies" assumes the present rates are based on stand-alone costs and accurately reflect cost causation. Mr. Guastella first noted that the difference of only $1.34 per month in Wabash referred to by Mr. Holbrook is hardly significant enough to be labeled a "subsidy" given the complexities and judgment involved in cost allocation. Furthermore, the average Wabash rate using the Guastella Allocation Method would be $18.65, which is over $4 per month more than the Company's original proposed Wabash rate. Likewise, the total annual Wabash operation revenues are $455,621 less under the Company's original proposal than they would be under individual operation pricing using the Guastella Allocation Method. (Id., pp. 15-17.) Therefore, Mr. Holbrook's assumption that any difference from his favored individual operation pricing approach and common cost allocation method is a subsidy is incorrect.

Mr. Guastella also took issue with Mr. Holbrook's allegation that STP would not cause rates to be more affordable. Mr. Guastella compared the estimated annual rates per Equivalent Residential Customer ("ERC") under STP to individual operation pricing using the Company Allocation Method over the same ten year period considered by Mr. Holbrook. He cautioned that a ten-year forward look would not truly demonstrate the benefits of STP, which are enjoyed over a longer horizon. Even with the ten-year look, he noted that Kokomo and Somerset represent the two extremes which are

higher and lower than STP. The Kokomo customer throughout the entire 10 years would pay an individual system rate very close to STP. The Somerset customers, however, would pay a rate that is $1,600 per year more than STP. (Id., pp. 18-19; Petitioner's Ex. JFG-R-3.) He pointed out that Mr. Holbrook himself showed an increase in Somerset of $649 per meter by 2002 under Mr. Holbrook's preferred rate design whereas under STP Mr. Holbrook calculated an increase in Somerset of only $114. (Public's Ex. 11, Sch. JAH-1, p. 2.) On cross-examination Mr. Holbrook said he would not describe the Somerset rates his schedule shows result from his recommended rate design as affordable.

Mr. Guastella also estimated the stand-alone costs of serving each individual operation to disprove Mr. Holbrook's suggestion that STP might incent some operations to leave the system. After estimating the portion of common costs that each operation would separately incur were it a stand-alone utility, he concluded that rates under STP would be lower for each operation than the costs for any of the individual operations were it a stand-alone utility. (Petitioner's Ex. JFG-R, pp. 19-21.)

Dr. Beecher also testified in rebuttal regarding STP. She stated that the goal of regulation is to balance the interest of the utility with the interest of the customers, and economic efficiency concepts alone (such as those discussed by Mr. Holbrook) are not adequate to achieve or maintain this balance. She testified that many commissions have approved STP based on the perception that STP satisfies the fairness criterion of ratemaking. She also stated that the issue of subsidization raised in the economic regulatory literature is usually in the context of rate design by customer class (residential, commercial, industrial, etc.), rather than in the context of geographic cost differences. She said Mr. Holbrook observes a "subsidy" because he has chosen to group customers in a given way, that is, by geographic area. Different conclusions would be reached if customers were grouped in a different way, such as by customer classification. She further explained that some price discrimination is inevitable because rates are not set for each customer. Therefore, the issue in ratemaking is whether the discrimination is "undue". She also testified that the failure to achieve economies of scale and scope is the most significant barrier to the provision of safe, adequate, and reliable water and wastewater services. Acquisitions would

enable greater efficiency, capturing these economies, and STP would encourage these acquisitions. (Petitioner's Ex. BEE-R, pp. 3-12.)

We are persuaded by Petitioner's evidence that movement toward STP is in the best interests of all of the customers. While over the short-term this may cause rates in some areas to be higher and rates in other areas to be lower than under individual operation pricing, we believe that in the long-term all areas will benefit by increased rate stability and mitigation of the impact of construction projects in their communities. Thus, while customers in Crawfordsville, Johnson County and Noblesville will benefit from smaller increases in this case, those same customers will in turn share costs in future cases of projects in other communities. There is no real dispute about this because OUCC witness Holbrook agrees that "[e]ventually Indiana-American will probably invest a large amount of capital in each of its operations." (Public's Ex. 11, p. 11.) In this way, all customers will share in the benefit and costs of being part of the customer base of a consolidated, statewide, centrally operated and managed utility. As we move to the 21st Century, we will have to deal with significant environmental issues, the expansion and rebuilding of the existing water utility infrastructure, and the need to make adequate water utility service available to Indiana citizens who now lack that service. A pricing system like STP which is consistent with the way in which other utility services and non-utility services are priced will better allow the Company and its customers to deal with these issues.

When we review the history of pricing for other utility services, we see that individual operation pricing is largely an anachronism. With respect to energy and telecommunications services, the issue of whether prices should reflect geographic differences was once hotly debated in the State of Indiana and elsewhere. In fact, in 1929 a majority of the Commission held that separate electric rates should be set for each municipality. Jap Jones v. Wabash Valley Elec. Co., Cause No. 8894, PUR 1929B, p. 561 (PSCI 8/11/29). The concern expressed at that time was that the 1913 Act "did not intend to build up state-wide utilities so large as to make it impossible to have a check on them." (Id., p. 580.) Others strenuously defended the value of statewide utilities and uniform statewide pricing as valuable instruments for expanding utility services beyond the densely populated urban areas where the utilities originally developed. This viewpoint is best represented

by a 43 page dissenting opinion in a 1932 order involving Public Service Company of Indiana (now PSI Energy, Inc.) written by Commissioner Cuthbertson and in which Chairman McCardle concurred. In supporting uniform statewide electric rates, the dissenters described the development of the PSI system as follows:

> [A] transmission system, such as now prevails . . . was a contribution to progress and . . . the utility should be commended for taking such progressive steps in the development of the state . . . .

City of Bloomington v. Public Serv. Co. of Ind., Cause No. 10164, PUR 1932A, p. 177, at 183 (PSCI 8/7/31). These commissioners saw a strong connection between single tariff pricing and the expansion of utility service.

During the same period, the Governor of New York and soon to be President of the United States Franklin D. Roosevelt expressed similar opinions in a speech quoted in an article from the New York Times attached to Dr. Boquist's testimony:

> **Reasonably Equal Service and Cost.**
>
> "Now, I am sorry to say that the principle of reasonably equal service at reasonably equal cost to all the people of the State has not been carried out with regard to the two latest forms of public service -- the telephone and electricity.
>
> "For some reason (the history of which it is unnecessary to go into) the original telephone companies were allowed to charge different kinds of rates, and now, when practically all telephones are controlled by the greatest of all American mergers, we do not insist on either uniform service or uniform rates.
>
> . . .
>
> Regional Differences in Rates.

"The other example, and one which is even more glaring in its unfairness, is that of the use of electricity in the homes. The railroad principle of fairly uniform rates has been thrown to the winds even by the public regulating body known as the Public Service Commission.

"Is it [now] time to stop and ask the question: 'Why does electricity in the home, the electric lights, electric refrigerator, electric sewing machine, the home machinery, cost as high as from 15 to 20 cents per kilowatt hour in some localities and as low as from 4 to 6 cents per kilowatt hour in other localities.'

"Why should families in one section be so grossly penalized over families in another section?

"This difference in charges is true not merely in its application to regions as large as counties, but is true in respect to towns adjoining each other and houses separated only by a mile or two.

"This is perhaps one reason why even today nearly two-thirds of all the farm houses in the State of New York have no electricity.

"I am wondering whether it is not time for the people of this State to ask for the application of a more uniform rate and a more uniform system of charging for installation."

In 1933 the Supreme Court affirmed the position of the Commission majority that Indiana law required municipalities to be treated as separate ratemaking units. (See, Wabash Valley Elec. Co. v. Young, 287 U.S. 488 (1933)). However, the Indiana legislature, recognizing the need to reverse this policy, immediately passed a new statute (which is now part of Ind. Code

§ 8-1-2-4) to expressly authorize the Commission to prescribe uniform rates on a regional basis. That statute states:

> The commission, in Order to expedite the determination of rate questions, or to avoid unnecessary and unreasonable expense, or to avoid discrimination in rates between classes of customers, or, whenever in the judgment of the commission public interest so requires, may, for rate making and accounting purposes, or either of them, consider a single municipality and/or two [2] or more municipalities and/or the adjacent and/or intervening rural territory as a regional unit where the same utility serves such region, and may within such region prescribe uniform rates for consumers or patrons of the same class.

Thereafter, the Commission also adopted a policy against segregation of costs as between telephone exchanges. This is shown in published orders involving Indiana Bell Telephone Company and General Telephone Company of Indiana. See, Indiana Bell Tel. Co., Cause No. 19049, 72 PUR(NS) 191, 211-212 (PSCI 8/14/47); Indiana Bell Tel. Co., Cause No. 27166, 22 PUR3d 106, 110 (PSCI 8/9/57); General Tel. Co. of Ind., Cause No. 28196, 35 PUR3d 77, 85 (PSCI 5/27/60); General Tel. Co. of Ind., Cause No. 31661, 73 PUR3d 230, 234 (PSCI 2/16/68). This movement to statewide pricing was consistent with the national trend. As stated in Phillips, The Regulation Of Public Utilities, 3d ed. (1993), p. 517, with respect to telephone pricing: "The objective is to apply throughout the state a well-balanced and coordinated pattern of rate treatment, providing rates that are uniform under substantially like conditions and producing, in the aggregate, reasonable earnings on the company's total telephone operations within the state." (Quoted in Petitioner' s Ex. BEE-R, p. 8.) In his treatise, Dr. Phillips cited five reasons for statewide pricing of telephone service: (1) the statewide basis permits more people to have better service at a reasonable price, (2) customers pay like charges for like amounts of service, (3) customers seem better satisfied with statewide rates, (4) the statewide basis tends to stabilize rates, and (5) the statewide basis makes the regulatory process less cumbersome and expensive. (Id., pp. 9-10.) These very same reasons justify STP in this case. We find the telephone and

electric utility experience is particularly pertinent -- while everybody today has telephone and electric service (a result in no small part due to STP), many Indiana citizens still lack water utility service.

We recognize that electric and telephone utilities have interconnected facilities. But that does not diminish the facts that (a) they still have geographic differences in costs and (b) we have decided those differences should not be considered in the ratemaking process. We already have a policy against considering geographic differences in costs within an interconnected system. For example, customers on the north side of town pay the same rates as customers on the south side of town even though the sources of supply, transmission mains, pumping stations and distribution lines serving those different areas may have different costs. Some may advocate that we should engage in theoretical exercises to estimate the costs which fourteen different water areas and two different sewer areas impose on a single statewide centrally operated and managed entity like Indiana-American. However, the evidence shows such exercises are inevitably futile. Even OUCC witness Holbrook conceded: "Unfortunately, we do not know what the stand-alone cost is for Indiana-American's customer groups . . . ." (Public's Ex. 11, p. 9.) We cannot simply assume there are more subsidies with STP than under Mr. Holbrook's proposal. In fact, Mr. Guastella's analysis of stand-alone cost would indicate there are more so-called subsidies in Mr. Holbrook's proposal than with STP. Indeed, every criticism Mr. Holbrook levels at STP applies equally to his preferred rate design. There will always be customers who over a given period of time will be required to pay higher rates than would result if they were included in some smaller or different customer group. But this does not mean undue discrimination exists so long as they are paying an equivalent price for an equivalent product. Moreover, we must not forget that all of the customers today are the beneficiaries of water facilities built in the past, and the cost of developing these facilities was borne in large part by earlier generations of customers.

We find STP to be fully consistent with the ratemaking concept embodied in Ind. Code § 8-1-2-103(a) which states:

> No public utility . . . may charge, demand, collect, or receive from any person a greater

> or lesser compensation for any service . . . than it charges, demands, collects, or receives from any other person for a like and contemporaneous service.

We have never treated the existence of an interconnection as the determining factor as to whether STP will be approved. In 1981, we approved uniform rates in Petitioner's Sullivan and Terre Haute operations which are not interconnected. (Terre Haute Water Works Corp., Cause No. 36427, PSCI 11/13/81.) The OUCC relies heavily on our Order dated February 4, 1994 in Cause No. 39595 wherein we last considered STP for Petitioner. However, in that Order we stated "we reject Petitioner's single-tariff pricing proposal at this time." (Order, p. 53, emphasis added.) We did not forever close the door on STP. Since that time, Indiana-American acquired Indiana Cities and has grown from serving a few communities to serving many communities throughout the state. The increased number of communities served now makes STP most sensible for this Petitioner, based upon the record in this Cause. Indeed, the administrative demands of maintaining fourteen separate water districts with a rate base and a tariff structure for each district within a single company calls for the type of regulatory response evidenced by Petitioner's proposal. This consideration would not have the same weight for utilities having fewer separate districts and tariffed rates. Moreover, the customers have benefitted from large cost savings as a result of this consolidation. Also, Dr. Beecher's survey shows that STP has in recent years gained growing acceptance throughout the country. In 1996, we approved common rates for Franklin and Greenwood, and for Jeffersonville and New Albany. We find that it is appropriate at this time to reduce the number of rate groups consistent with Petitioner's modified STP proposal.

Another significant difference in this case is that the landscape of the water utility industry has changed. With the SDWA, costs have increased substantially to provide service, especially in smaller operations. For example, OUCC witness Holbrook admitted that his rate design proposal would lead to rates in Somerset which he would not consider affordable. Other small utilities in this state or unserved areas that need water for public health reasons are going to require similar capital outlays. We would be ignoring our purpose if we condemned these customers to

a lower quality of life by not establishing mechanisms such as STP which allow water to be provided at affordable rates.

At the final evidentiary hearing, Petitioner and Wabash presented as a Joint Exhibit a Settlement Agreement regarding the rate increase for the Wabash operation. (Indiana-American/Wabash Joint Ex. EWT-S-1.) The Settlement Agreement provides for a 9.9% across the board increase to rates in the Wabash operation. This increase would apply regardless of the Commission's resolution of other issues in the case. The Settlement Agreement would further modify Petitioner's STP proposal to create a fifth rate group for general water service and fourth rate group for public and private fire service for the Wabash operation. The Settlement Agreement provides that if the Commission accepts Indiana-American's modified STP proposal in whole or in part, the rates applicable in the other operations would be designed to recover the total-company revenue requirement (including Wabash) less $1,414,632, using whatever rate design and cost allocation approach the Commission may adopt for the other operations. This amount represents the revenue requirement for Wabash as set forth in the Company's case-in-chief with an individual operation rate design using the Company Allocation Method. Petitioner's case-in-chief proposed a 10.52% increase for the Wabash operation. Under the Settlement Agreement, the Company would absorb the differential of $7,552 between a 9.9% increase and the rates that would have resulted under a 10.52% increase. For five years, Wabash would remain in a separate rate group with rates designed on an individual operation basis using the Company Allocation Method. For the same five years, Wabash will not initiate or continue any efforts to acquire Petitioner's utility properties by eminent domain. The Settlement Agreement provides it is the result of settlement and compromise, shall be of no effect unless and until approved by the Commission in its entirety, and shall not be used or relied on by any party to the settlement agreement for any purpose other than resolution of certain issues in this Cause.

The OUCC opposed the Settlement Agreement. They argued that there is a revenue shortfall of $350,000 which would be shifted from the Wabash District to ratepayers in other districts. The evidence submitted, however, shows that Petitioner originally requested a 10.52% increase in rates for the Wabash District and that the actual increase would be 9.9% pursuant to the Settlement. This resulting $7,552 shortfall would be absorbed by the Company.

The $350,000 differential is not the result of the Settlement but rather the result of a gradual movement toward STP.

We find that the Settlement Agreement with Wabash should be approved. Our determination should not be construed as a comment on the viability of Wabash's consideration of taking over the system serving the town by eminent domain. Rather, that Wabash's individual operation rates are the farthest below STP. While Southern Indiana's situation is somewhat similar we know that STP will soon benefit Southern Indiana as early as the next rate case because of Petitioner's ongoing construction in that area. Under the circumstances, it is reasonable to establish on a temporary basis a separate rate classification for Wabash. The OUCC's opposition to STP centers primarily around the short-term impact on rates in a few operations. Mr. Holbrook identifies Wabash Valley, Seymour, Muncie and Wabash as the four operations paying an alleged "subsidy" over the entire ten year period through 2006. (Public's Ex. 11, p. 15, lines 7-8.) However, Mr. Holbrook's schedule indicates that except for the Wabash operation, the disadvantages of STP rates to these operations is relatively small. (Id., Sch. JAH-1, p. 3.) The Settlement Agreement largely resolves the issue raised by the OUCC.

For the reasons previously discussed, we approve Petitioner's proposal to reduce the number of rate groups, as modified by the Settlement Agreement. Accordingly, subject to our revenue requirement findings, the rate groups for water service identified on Petitioner's Ex. JFG-5, Sch. 3 are approved except additional groups for general water service, public fire service and private fire service shall be created for the Wabash operation. Likewise, subject to our revenue requirement findings, we approve Petitioner's proposed rate design for its two sewer operations which would maintain separate rates but move the rates closer to STP.

Petitioner therefore should file its proposed rates and rate schedules as set forth in Petitioner's Ex. JFG-5, Sch. 3, and Petitioner's Ex. JFG-6, Schedule 1, modified as discussed above, with a reduction therein to each rate group applied to the extent practicable evenly and uniformly to all proposed service charges, volumetric rates and public and private fire charges so as to provide the revenue adjustment for each rate group authorized herein.

IT IS, THEREFORE, ORDERED BY THE INDIANA UTILITY REGULATORY COMMISSION that:

1. Petitioner is hereby authorized to adjust and increase its rates and charges for water and sewer utility service by approximately 9.96% in accordance with the findings herein which rates and charges shall be designed to produce total annual operating revenues of $67,361,062 which, after annual operating expenses of 47,098,346, are expected to result in annual net operating income of $20,262,716.

2. Petitioner shall file new schedules of rates and charges with the Engineering Division of the Commission on the basis set forth in Finding No. 11. Such new schedules of rates and charges shall be effective upon filing and approval by the Engineering Division and shall apply to water and sewer usage from and after the date of approval.

3. The Settlement Agreement between Petitioner and Wabash is approved and shall be implemented as provided herein.

4. Petitioner shall implement new depreciation accrual rates pursuant to Finding No. 7.

5. This Order shall be effective on and after the date of its approval.

McCARTY, HUFFMAN, KLEIN, SWANSON-HULL AND ZIEGNER CONCUR:
APPROVED:

I hereby certify that the above is a true
and correct copy of the Order as approved.

Brian J. Cohee, Secretary to the Commission
and Executive Director

169 PUR4th 252

ORIGINAL

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF INDIANA-AMERICAN WATER COMPANY, INC., INCLUDING INDIANA CITIES WATER CORPORATION WHICH IS OPERATIONALLY COMBINED WITH, LAWFULLY DOING BUSINESS AS, AND IN THE PROCESS OF MERGING WITH INDIANA-AMERICAN WATER COMPANY, INC., FOR AUTHORITY TO INCREASE ITS RATES AND CHARGES FOR WATER AND SEWER SERVICE AND FOR APPROVAL OF NEW SCHEDULES OF RATES AND CHARGES APPLICABLE THERETO.	)	CAUSE NO. 40103 APPROVED: MAY 30 1996

BY THE COMMISSION:
Mary Jo Huffman, Commissioner
Scott R. Jones, Assistant Chief Administrative Law Judge

On December 14, 1994, Indiana-American Water Company, Inc. ("Petitioner", "Indiana-American" or "Company") filed its Petition in this Cause for authority to adjust its rates and charges for water and sewer service rendered by it and for approval of new schedules of rates and charges applicable thereto. Petitioner filed its case-in-chief on March 31, 1995.

Pursuant to the Prehearing Conference on January 25, 1995, the Prehearing Conference Order dated February 8, 1995, and notice of hearing given as provided by law, proof of which was incorporated into the record by reference and placed in the official files of the Commission, public hearings in this Cause were held on May 18-19, 1995 and August 10, 11 and 14, 1995 in Indianapolis, Indiana. Commissioner David E. Ziegner and Administrative Law Judge Gregory S. Colton presided over those hearings. At the hearings, evidence offered by Petitioner and the Office of Utility Consumer Counselor (the "OUCC" or "Public") was received and admitted. Pursuant to Ind. Code § 8-1-2-61(b), a public field hearing was held on June 27, 1995 in Muncie, the largest municipality in Petitioner's service area, at which time members of the public were afforded the opportunity to make statements to the Commission. Public field hearings were also held in the Cities of New Albany, Newburgh and Greenwood on August 3, 7 and 14, 1995, respectively.

Based upon the applicable law and the evidence of record, the Commission now finds:

1. Notice and Jurisdiction. Due, legal and timely notice of the filing of the Petition in this Cause was given and published by Petitioner as required by law. Proper and timely notice was given by Petitioner to its customers summarizing the nature and extent of

the proposed changes in its rates and charges for water service. Due, legal and timely notices of the Prehearing Conference and the public hearings in this Cause were given and published as required by law. Petitioner is a "public utility" within the meaning of that term in Ind. Code § 8-1-2-1 and is subject to the jurisdiction of the Commission in the manner and to the extent provided by the laws of the State of Indiana. This Commission has jurisdiction over Petitioner and the subject matter of this proceeding.

2. **Petitioner's Characteristics**. Petitioner is an Indiana corporation engaged in the business of rendering water utility service to approximately 160,000 customers in fifteen counties in the State of Indiana. Petitioner's principal office is located in the City of Greenwood. Petitioner provides water service by means of water utility plant, property, equipment and related facilities owned, leased, operated, managed and controlled by it, which are used and useful for the convenience of the public in the production, treatment, transmission, distribution and sale of water for residential, commercial, industrial, sale for resale and public authority purposes. Petitioner also provides public and private fire protection water service. In addition, Petitioner provides sewer utility service in Somerset, Indiana.

At the time the petition in this proceeding was filed on December 14, 1994, Indiana-American was in the process of merging with Indiana Cities Water Corporation ("Indiana Cities"), which was to become a subsidiary. Indiana Cities was originally a joint petitioner herein, pursuant to authority granted by the Commission in its Order dated November 9, 1994 in Cause No. 40019. At the time the petition was filed, Indiana-American provided water utility service in and adjacent to Kokomo, Muncie, Richmond, Seymour, Sullivan and Terre Haute, Indiana; Indiana Cities provided water utility service in and adjacent to Crawfordsville, Franklin, Greenwood, Jeffersonville, New Albany, Newburgh, Noblesville, Shelbyville, Somerset, Summitville and Wabash, Indiana; and Indiana Cities provided sewer utility service in Somerset, Indiana. The merger with Indiana Cities was completed effective January 1, 1995, with Indiana-American being the surviving corporation. As of that date, Indiana Cities ceased to be a separate corporate entity. This rate proceeding involves all areas served by Indiana Cities and Indiana-American prior to the merger, all of which are now served by Indiana-American since its acquisition of and merger with Indiana Cities.

3. **Relief Requested**. Petitioner's existing basic rates in the areas served by Indiana-American prior to the merger were approved by the Commission's Order in Cause No. 39595 dated February 2, 1994. Petitioner's rates in the areas served by Indiana Cities prior to the merger were authorized by the Commission's Order dated September 29, 1993 in Cause No. 39641, except for the Shelbyville and Somerset operations for which rates

were last authorized by the Commission's Order dated July 8, 1992 in Cause No. 39166.

In this proceeding, Petitioner originally requested an overall rate increase of 12.04%, which it later reduced to 10.4%. The proposed increase varies by local operation. Petitioner requests that the rate increase within each local operation be made on a uniform, across-the-board basis. Petitioner asserts that a rate increase is necessary due to significant capital expenditures for additions and improvements to its facilities and increases in its cost of capital. The rate increase also reflects Petitioner's request for a return on and a return of the acquisition adjustment of approximately $17.4 of the $37 million expended by Indiana-American in acquiring Indiana Cities.

The OUCC proposed that Petitioner's rates be increased by only 0.5%, and has not contested an across-the-board implementation of new rates.

4. **Test Year**. Pursuant to the Prehearing Conference Order, the test year to be used for determining Petitioner's actual and pro forma operating revenues, expenses and operating income under present and proposed rates is the twelve months ended December 31, 1994. The financial data for such a test year, when adjusted for changes as provided in the Prehearing Conference Order, fairly represents the annual operations of Petitioner. We therefore find that such test year, as adjusted, is a proper basis for fixing new rates for Petitioner and testing the effect thereof.

5. **Acquisition Adjustment**. On August 31, 1993, Indiana-American acquired the common stock of ICWC Holdings Inc. which owned all of the common stock of Indiana Cities. The acquisition was made pursuant to Commission approval granted by our Order in Cause No. 39669, dated July 7, 1993. ICWC Holdings was subsequently dissolved, making Indiana Cities a direct subsidiary of Indiana-American. The purchase price paid for Indiana Cities' common stock was $37,344,610. After adjustment upward for acquisition related costs and downward for certain investment tax credit benefits, Indiana-American's total investment to acquire Indiana Cities was $37,072,008. The book value of Indiana Cities common equity at the acquisition date was $19,659,999. The difference between the investment to acquire Indiana Cities and the book value of Indiana Cities was $17,412,009. (Petitioner's Ex. JLC-2, Sch. 1) This amount is termed an "acquisition adjustment" and is booked on Indiana-American's balance sheet as an intangible asset. Indiana-American proposes to amortize the acquisition adjustment over a period of forty years commencing with the rate order in this proceeding.

Two acquisition issues presented in this proceeding are: (a) whether Indiana-American should be allowed the full amount of its investment to acquire Indiana Cities by including the acquisition

adjustment in the rate base upon which the Company is allowed to earn a return, and (b) whether Indiana-American should be allowed to recover its investment over time by including the annual amortization of the acquisition adjustment as an allowable expense for ratemaking purposes, i.e. by amortizing it as an "above-the-line" expense.

A. Summary of Petitioner's Arguments and Evidence. The Commission has considered the appropriate ratemaking treatment for acquisition adjustments many times in the past. Petitioner suggests that in evaluating Petitioner's requested acquisition adjustment treatment, the Commission should apply the criteria set forth in our Order in Cause No. 38302, an Order issued on January 20, 1988 addressing the merger of Indiana Gas Co. and Westport Nat. Gas Co., 89 PUR4th 416 ("Indiana Gas/Westport"). In that Cause, Indiana Gas requested that the Commission approve favorable ratemaking treatment for the acquisition adjustment it incurred in acquiring the gas utility properties of Westport, including a return of and on the adjustment.

Petitioner notes that the criteria set forth in the Indiana Gas/Westport Order for recognition of acquisition adjustments in ratemaking are similar to those described by various authors. See Hahne & Aliff, Accounting For Public Utilities, Matthew Bender, 1991, p. 4-11; Priest, Principles of Public Utility Regulation, The Michie Company, 1969, p. 190; Turner, Trends and Topics in Utilities, Public Utilities Reports, Inc., 1969.

Similarly, in Highland Utilities, Inc. (IURC 2/20/91), Cause No. 38890, pp. 2-3, we described the pertinent analysis as follows:

> The Commission has in the past determined that factors which are appropriate to consider in determining whether an acquisition adjustment should be allowed include benefits to the ratepayers as well as the prudence of the purchase. Such benefits could include improved service, savings of related expenses in the provision of service, and the expertise which the purchaser may bring to the service area. These are just some of the considerations which the Commission has in the past enumerated.

In light of the above standards set forth in past Commission Orders, Petitioner presented evidence intended to demonstrate that the acquisition of Indiana Cities was an arm's length transaction, that the purchase price was reasonable, and that, over the proposed 40 year amortization period of the acquisition adjustment, ratepayers would experience net savings totaling $122 million as a result of the merger.

B. Summary of OUCC's position. The OUCC opposed any return on or of the acquisition adjustment. OUCC Witness Mr. Gassert testified that traditional ratemaking principles hold that

acquisition premiums should not be included in rate base or given above-the-line operating income treatment. As explained by Mr. Gassert, abuses from the 1920's and 1930's created the need to adopt the "original cost" concept in setting rates. In the 1920's and 1930's, utilities were acquiring other utility properties for amounts in excess of net book value. This valuation and transfer in excess of book value (*i.e.*, acquisition premium) created inflated rate bases, that, when included for ratemaking treatment, resulted in higher rates to the same existing customers. This meant that customers would be paying a premium through higher rates for the same property that had been providing them utility service prior to the merger and acquisition. Regulators were cognizant that if utilities were allowed to earn a return on investment in excess of original cost, investors could realize windfall profits. Accordingly, regulators determined that it was not reasonable to charge customers higher rates for the same utility property simply because the utility providing service was acquired by another company.

The OUCC noted that in the past the Commission has followed a case-by-case analysis in determining whether a utility which acquires another utility's property should be allowed the opportunity to earn a return on and a return of the excess of the purchase price over book value. Often, a return on and of the acquisition adjustment is approved in order to encourage the acquisition of utilities that are small in size, or "troubled," either financially or with regard to the quality of service provided. The OUCC notes that none of the Commission's prior cases involved an acquisition adjustment of the magnitude requested in this case for the acquisition of a company which is neither small nor troubled.

The OUCC opposes the acquisition treatment sought by Petitioner because that treatment will result in ratepayers paying approximately $72 million more in rates over the next 40 years than would otherwise be paid. The OUCC challenges the reliability of Petitioner's projected savings on grounds that they are subjective and difficult to quantify. In addition, the OUCC questions Petitioner's assertion that the savings were only possible as a result of the merger. Finally, the OUCC questions whether projected merger savings can be sustained over the entire 40 year amortization period proposed by Petitioner.

C. **Discussion**. It could be said that the primary role of the Commission is to find a proper balance between a utility's ratepayers and its investors. While we are experienced at finding that balance in rate cases generally, that balance is more difficult to determine in cases involving acquisition adjustments specifically, for two reasons. First, acquisition adjustments are infrequently encountered, so we are generally less familiar with the issues involved; and second, it has been difficult to establish firm criteria to govern acquisition adjustments, because the fact

situations presented in each case have tended to be highly unique and not conducive to generalization. As a result of these circumstances, confusion has resulted as to what standards the Commission employs in determining how to balance the interests of ratepayers and investors in the context of an acquisition adjustment. In reviewing our past decisions involving acquisition adjustments, we observe that this Commission has consistently adhered to a standard which has discouraged the allowance of a return on or of an acquisition adjustment. This standard was intended to protect ratepayers from paper transactions that inflate a utility's rate base, in turn leading to higher rates, with no attendant benefits.

Nonetheless, it has been possible to receive relief within the standard. For example, a petitioner might demonstrate that the acquired utility is troubled. On several occasions this Commission has granted favorable acquisition treatment where it has been shown that the acquired utility was badly managed, undercapitalized, or too small to be efficient. To encourage the acquisition of these small and/or troubled utilities by larger or abler utilities, the Commission has authorized favorable acquisition treatment, provided the acquisition was the result of an arm's length transaction at a reasonable price. The actual criteria employed have varied from case to case, as well as their outcomes. Additionally, a petitioning utility might demonstrate that the acquisition price was reasonable and that benefits accruing to ratepayers as a result of the acquisition warrant favorable treatment of the acquisition adjustment. Again, the actual criteria employed have varied from case to case, as have the outcomes of those cases.

In the case at hand, Petitioner argued both grounds typically used in the past. Namely, that Indiana Cities was a small, troubled utility, and in the alternative, that the purchase price was reasonable and that the benefits accruing to the ratepayers justified favorable acquisition treatment.

Petitioner went to great lengths through its evidentiary presentation to meet each of the two historically typical criteria which this Commission has viewed favorably when considering requests to provide rate relief related to the acquisition of one utility by another. Petitioner argued and attempted to demonstrate this acquisition will produce net savings for its customers. Petitioner also attempted to demonstrate that it was acquiring a troubled utility. In both instances Petitioner presented evidence that the purchase price was reasonable and the result of an arm's length negotiation.

Petitioner also presented extensive evidence intended to show that cost savings resulting from the merger would significantly outweigh the rate impact upon ratepayers of the above-the-line amortization, or return on, the requested acquisition adjustment. This evidence was presented using a net present value methodology,

which extended 40 years beyond the date of the transaction. The OUCC disputed the reliability of Petitioner's cost savings evidence. We need only consider the cost savings evidence if we find there is reason to incent the Petitioner to consummate the merger by allowing an above-the-line expense amortization or unusual return on the expense between the purchase price and book value of the utility.

As to the "troubled utility" issue, Petitioner's Witness Eckart, the former Chief Operating Officer of Indiana Cities, testified that Indiana Cities had difficulty obtaining financing needed for construction, which resulted in extensive litigation, inadequate coverages, postponed construction projects and inadequate access to equity and debt capital. Petitioner's Witness Johnstone, however, conceded that Indiana Cities was able to attract and retain the required technical expertise and managerial talent before the merger; that prior to the merger, Indiana Cities was able to comply with the rigid standards of service he described in his direct testimony; and that there were not a lot of problems in bringing Indiana Cities "up to par."

Our preliminary review of Petitioner's attempt to provide sufficient evidence to meet either or both exceptions to the apparent standard which would otherwise dissallow favorable acquisition treatment indicates that Petitioner did not succeed. The facts in this case do not appear to describe the type of transaction which has in the past been found to warrant favorable treatment. For example, we are not convinced that Petitioner acquired a troubled utility. In that connection, we find the cross-examination of Petitioner's witness Johnstone illustrative of the strengths of Indiana Cities prior to its acquisition. (Direct Transcript GWJ 7, 9) Additionally, we perceive that some cost savings are the natural result of a sensible consolidation of utility systems, which would appear to undermine Petitioner's claim of its responsibility for the generation of significant savings through management effort. We do not believe such natural synergies are the type of substantial savings and benefits sufficient to invoke an exception from the general propensity of the traditional standard to disallow favorable treatment of an acquisition adjustment. See, for example, Hahne & Aliff, Accounting For Public Utilities, Mathew Bender & Co. Inc., 1983, §4.04[2]. See Also, Re: Indianapolis Water Company, Cause No. 37902, Approved May 29, 1986, at pp. 12-19. Thus, it appears evident that under a strict application of the described standard and its exceptions, Petitioner has failed to make a case for favorable acquisition adjustment treatment. Yet, it would seem inappropriate to conclude that Petitioner should not benefit from its new investment because its evidentiary presentation regarding the exceptions to the existing standard was not sufficiently convincing, when, for reasons described below, we find the transaction itself to be reasonable. Instead, it appears fitting to revisit the basis for the standard itself.

Congress enacted the Public Utility Holding Company Act of 1935 (PUHCA) to prevent the artificial inflation of utility assets. This Act addressed nation-wide concern about frequently traded utility systems, often between affiliated companies, with resulting artificially inflated worth which had adverse effects in the publicly traded stock market and upon captive customers in regulated monopoly markets. Thus, what state regulators were unable to prevent at one level of government, Congress prevented at another. It must also be observed that the enactment of PUHCA in the mid 1930's came on the heels of catastrophic results of artificially inflated assets trading publicly in unregulated markets in 1929. The seemingly traditional approach to ratemaking which disfavors acquisition adjustments appears to be driven by the concept that good public policy must discourage the acquisition of one public utility by another when the acquisition is made at an artificially inflated price. See Bonbright, Principals of Public Utility Rates, (New York: Columbia University Press, 1961)

It should be evident to utility regulators when a public utility system is frequently traded at a price which does not seem to be supported by reasonable purpose. Furthermore, government at state and federal levels, having identified this threat to customers and investors, has provided tools to state and federal regulators to prevent injury to the general public when a proposed acquisition of one utility by another presents evidences of abuse. (*See* PUHCA and I.C. 8-1-2-83.) Perhaps, then, it may be redundant to further discourage the acquisition of one utility by another through accounting measures when more direct regulatory means already exist. In the instant case, it is noted that the merger of Indiana American and Indiana Cities was approved by this Commission in Cause No. 39669 on July 7, 1993.

Turning more closely to the accounting treatment traditionally afforded acquisitions, we observe that utility treatises and regulatory orders which have relied upon them have been premised upon original cost ratemaking methodologies. Re Indiana Gas Company, Inc., Cause No. 38302, approved January 20, 1988, P.U.R. 89 PUR4th 416. Such methodologies would not consider the appreciation of the value of an asset in the absence of unusual phenomena. Thus, it naturally follows that such approaches would seek unusual benefits to customers as a justification for the recording of the difference in market and book prices either as an expense in the utility income statement or as an asset in the utility balance sheet. Further, this regulatory perspective would not recognize the value of the acquired utility system as a whole. For example, it would disregard potential customer growth in the service territory, the price for delivery of utility service to customers relative to comparable prices in nearby competing service territories, the development of corporate culture in delivering a reliable product to the public at an attractive price, and the natural dynamics which may be expected from the merger of two utility systems which are both well run and should benefit both

customer and investor alike and therefore be a non-event for regulatory purposes but for the acquisition adjustment issue. It should further be observed that in an original cost jurisdiction, the allowance of an adjustment to ratebase for the difference between the purchase and book prices of the acquired system would imply a return which would recognize historic inflation upon an asset which has just recaptured that inflation in the adjustment. For a discussion on this distinction regarding the components of inflation in returns, see Indianapolis Water, 484 N.E.2d 635, and Public Service Indiana, IURC Cause No. 37414 S2, approved April 4, 1990 at pp. 41-44.

With these contextual observations having been made, it appears appropriate with the instant request to reconsider our approach to the ratemaking treatments to be given in this jurisdiction to utility acquisitions. In that connection, it is also appropriate to consider the future policy challenges these regulatory treatments will be intended to address. After all, it would seem senseless to design a socket wrench for the purpose of driving a nail.

We are generally aware through previous grants of certificates of public convenience and necessity or of territorial authority that many small investor-owned utilities were created to service various local residential and commercial developments throughout the state. These utilities tend to be owned by closely-held corporations which may be in turn owned by one shareholder or one family. It is becoming more frequent that the shareholders who also manage the utility are ready to be rid of their utility obligations. (i.e., retirement, or other reasons) The future of Indiana utilities suggests many potential acquisitions, if the recent past is any indication. See Cause Nos. 37153, 37165, approved September 11, 1984, 37579, 37590 approved May 12, 1985, 37962 approved May 29, 1985, 37962 approved February 26, 1986, 38034 approved January 21, 1987, 38126 approved August 12, 1987, 38302 approved January 20, 1988, 38302 approved April 27, 1988, 39090 approved May 1, 1991, 39471 approved September 23, 1992, and 39353 approved September 28, 1992.

A review of our decisions over the past decade reveals consistent attempts to create a test for the recoverability of acquisition adjustments based upon circumstances which may be too particular to provide general application. For example, we have considered cases involving unusual benefits to ratepayers as a result of the acquisition Re: Indianapolis Water Company, Cause No. 37962, approved May 29, 1986, 75 P.U.R.4th 643 or cases where a troubled utility should be passed to more capable hands West Lafayette, Cause No. 39471 approved September 23, 1992. Through our recent orders, we have not devised a test to determine whether one utility's acquisition of another is beneficial where no unusual circumstances are extant. While we have not yet discussed the evidence surrounding this transaction, it does appear that the

request now presented may well describe in this particular proceeding a transaction having no unusual features other than the attendant request for an acquisition adjustment in rates as we have historically treated it.

There must be a point at which the fact that Indiana is a fair value jurisdiction is incorporated into the ratemaking formula for acquisition-related requests in public utility ratemaking. Fair value jurisdictions do recognize the difference between market and book prices of utility systems. Thus, the ultimate test of a utility's worth would occur when it is traded on the open market as a result of arm's length negotiations, where other evidence shows that the resulting fair market value of the system should be considered *prima facie* fair value, and thus, included in fair value rate base.

Under such a regulatory methodology, the purchaser would presumptively earn a return on the purchase price of the acquired utility. It also follows that a fair return would not allow double recovery of historic inflation if we recognize the event in the fair valuation of rate base. See Indianapolis Water, Cause No. 39713, approved August 10, 1994.

Having made these observations it is appropriate to reconsider when above-the-line expensing is appropriate for the difference between market and book prices of utility acquisitions. We generally know that an investor holds an investment instrument over a period of time and receives compensation in the form of interest or dividends while holding the investment instrument. It also is often the case that the investor anticipates growth in the principal value of the investment instrument if the instrument is in the form of common stock. It is not the case, however, that the investor anticipates a return of the price paid for the instrument over the life of the holding period.

When the fair value of an acquisition is included in fair value rate base for purposes of establishing rates, it would seem inappropriate to reward an acquiring utility with an above-the-line adjustment of the difference between book and market price while it holds the investment. Instead, the redistribution of capital growth should occur when the investment is traded. Any above-the-line adjustment, for acquisition recognition purposes, must reflect the unusual event described by "traditional" policy and inure to the ultimate benefit of the utility systems' customers.

We have therefore determined that there must be for future purposes a base-case treatment of utility acquisitions. The benefit to ratepayers and stockholders of the establishment of such a criterion is the provision of a level of certainty in regulatory acquisitions which should lessen transaction costs and provide for the continuation of reliable utility service.

With these observations in mind, we turn to the remaining evidence presented in this case pertinent to Petitioner's request for an acquisition adjustment.

6. Reasonableness of the Purchase Price. Ratemaking proposals connected with utility operations usually fall into familiar categories and may therefore be located in orders by this Commission in discrete findings, typically located within the operating revenue, expense, rate base, or return portions of the order. However, the rate impact of the acquisition of one utility by another may not necessarily be limited to a discrete category in the ratemaking formula; this finding addresses the Petitioner's request for an acquisition adjustment to reflect its purchase of Indiana Cities.

In support of the reasonableness of the Indiana Cities' purchase price, Petitioner presented evidence that the purchase was the result of an arm's length negotiation, that the $37.5 million acquisition price was comparable to prices submitted by other bidders, and that a fair value analysis supported the reasonableness of the price paid. The OUCC did not dispute Petitioner's evidence on the first two points, though it did question the fair value evidence. The OUCC also questioned whether Petitioner's $37.5 million purchase price was the result of an attempt to allocate to Indiana a disproportionate amount of the $62 million purchase price paid by American Waterworks to acquire the entire four-state Avatar system of water utilities. We examine below the evidence pertinent to these matters.

(A) Arm's Length Transaction. Petitioner's Witness George W. Johnstone, President and Chief Executive Officer of American Water Works Company, Inc. ("American") and a member of the Board of Directors of Indiana-American, testified regarding the negotiation of and the reasons for the acquisition of Indiana Cities by Indiana-American. Mr. Johnstone stated that the principal business of American is the ownership of the common stock of water utility companies. American has 23 utility subsidiaries (including Indiana-American) serving more than 6,000,000 people in more than 700 communities across the country.

Mr. Johnstone described the competitive bidding process used by Avatar Holdings Inc. ("Avatar"), the ultimate parent company of Indiana Cities, to sell its four utilities in Indiana, Ohio, Missouri and Michigan (the "Midwestern Utilities"). He described the negotiation of the ultimate purchase price through the stages of non-binding indications of interest, formal proposals, due diligence reviews, personal face-to-face negotiations, submission and acceptance of a final offer, and negotiation and execution of a detailed and definitive purchase agreement for the acquisition of Indiana Cities by Indiana-American as well as purchase agreements for the acquisition of the Avatar subsidiaries operating in Ohio,

Missouri and Michigan by other subsidiaries of American and, in the case of the Michigan utility, by American itself.

Mr. Johnstone testified that the purchase price which Indiana-American agreed to pay to acquire Indiana Cities was based on a careful determination of fair market value, analysis of appropriate financial parameters, financial modeling and market-to-book ratios. Mr. Johnstone testified that the purchase price was reasonable. He also pointed out that the acquisition cost per customer was significantly less than the current cost of adding a new customer to Indiana-American's system.

Petitioner also submitted the testimony of Peter H. Kind on the acquisition negotiations and the reasonableness of the purchase price. At the time of the acquisition, Mr. Kind was Managing Director of the Utility Finance Group of Kidder, Peabody & Co. ("Kidder") which has since merged into Paine Webber Incorporated. Mr. Kind is an investment banker and specialist in financial advisory services for utilities in the area of capital attraction, mergers and acquisitions. Kidder was retained by Avatar to serve as financial advisor in connection with the sale of its Midwestern Utilities, including Indiana Cities. Mr. Kind was responsible for the overall supervision of the project, including preparation of the descriptive offering memorandum, sales process strategy, bid process development and evaluation, and negotiation of key terms.

Mr. Kind testified that over thirty parties were initially contacted by Kidder and about twenty firms provided indications of interest. From this group, Avatar through Kidder invited six companies to submit formal proposals. Mr. Kind testified that selection of the companies to submit formal proposals was based on the competitiveness of their indications of interest, their experience and credentials in the water utility industry, their ability to satisfy regulatory and public interest requirements, and their ability to complete the transaction. Mr. Kind testified that the purchase prices ultimately negotiated with American for all the Midwestern Utilities as well as the purchase price agreed to for the acquisition of Indiana Cities by Indiana-American were actually less than the equivalent bids of another bidder.

After concluding that the ability to work with the highest bidder to complete the sale would be difficult, Avatar chose to negotiate with American. Notwithstanding another bidder's statement that it would increase its bid for Indiana Cities, which Avatar and Kidder thought would match or exceed the price agreed to by Indiana-American, Avatar chose to execute the stock purchase agreement with Indiana-American because of American's favorable reputation. Also, the sale of the Midwestern Utilities to American subsidiaries already operating in Indiana, Missouri and Ohio was assumed to reduce transaction closing costs to all parties and make it easier to obtain regulatory approvals.

The OUCC did not dispute the arm's length nature of the transaction. OUCC witness Gillingham testified that "there does not seem to be any contention that the sale of Indiana Cities was not the result of an 'arm's length bargaining.'"

We are satisfied that the purchase was made at arm's length. However, the validity of the resulting purchase price must be explored through other means, given the monopoly market and consequent scarcity of comparable market data.

(B) Competing Bids. To further support the reasonableness of the purchase price paid to acquire Indiana Cities, Petitioner discussed the competitive bidding process Avatar followed to implement the sale, the fact that the purchase price was actually less than the equivalent price offered by another bidder, and that other bidders showed a willingness to increase their bids. Mr. Kind testified that Indiana Cities was clearly the most attractive of the Midwestern Utilities based upon size, fundamental business prospects and potential for acquisition related economies and benefits and that the offered prices were within a close range.

The OUCC did not dispute Petitioner's evidence on competing bids.

(C) Market Valuation. Mr. Kind also analyzed the purchase price with reference to market valuation of publicly-traded water utilities at the time the formal proposals were submitted, including market to book ratios, price to earnings multiples, market value per customer and market value relative to plant investment. Mr. Kind said that the purchase price was within the range of implied "passive" values reflected by this market data. However, Mr. Kind emphasized that these market values did not reflect the additional value associated with the acquisition of control of the analyzed companies, such as Indiana-American obtained in the case of Indiana Cities. Mr. Kind further testified that the multiple of the purchase price over the book value of Indiana Cities was actually somewhat less than the then market to book ratio of the only publicly-traded Indiana water utility.

Mr. Kind also compared the purchase price to other utility acquisitions occurring in the marketplace and found that it was well within the implied valuation range, and in fact was at the low end of the range. Mr. Kind concluded that the reasonableness of the purchase price was supported by an analysis of public securities market and precedent transactions.

The OUCC did not dispute Petitioner's evidence on market valuation.

(D) Fair Value. Petitioner also submitted the testimony of John A. Boquist, Ph.D., Professor of Finance at the Indiana

University School of Business. Dr. Boquist evaluated the depreciated replacement cost of the Indiana Cities's utility properties at the time of the acquisition. Dr. Boquist testified that the treatment of depreciated replacement cost as the fair value of the acquired properties was appropriate. The starting point for Dr. Boquist's determination of the depreciated replacement cost of Indiana Cities's properties was an estimate of the reproduction cost new less depreciation ("RCNLD") as of December 31, 1992, performed by Petitioner's witness Jay W. Shutt. Dr. Boquist then adjusted the RCNLD amount downward by 2% per year to take into consideration technological change. The resulting amount was then increased by the cost of property additions and reduced by the replacement cost of property retirements from January 1, 1993 through August 31, 1993, the acquisition date. This resulted in an estimated depreciated replacement cost of about $97.5 million. Petitioner's witness James L. Cutshaw, Indiana-American's Director of Rates and Revenues, showed that after deducting debt and other liabilities, this amount was not less than the purchase price paid for the common stock. (Petitioner's Ex. JLC-2, Sch. 2) Therefore, Dr. Boquist concluded that the purchase price was reasonable because it did not exceed the fair value of the acquired net assets.

While the OUCC did dispute the accuracy of Petitioner's fair value determination, it did not present any contrary evidence of its own with regard to the fair value of the acquired utility.

As we discuss later in this Order, Petitioner's $97.5 million fair value determination for Indiana Cities appears to be exaggerated. While we agree with Petitioner that a fair value determination is probative of the reasonableness of the purchase price, we are not persuaded that an estimated depreciated replacement cost is the best indication of that fair value. We suggest that a better approximation may be found in Indiana Cities's last rate Order, issued on September 29, 1993 in Cause No. 39641. In that Cause, which was settled, the OUCC and Indiana Cities agreed on a number of matters, including a fair value rate base figure of $64,500,000. No doubt that figure was less than Petitioner proposed, but more than the OUCC would have liked. Nevertheless, it represented an approximate midpoint between two opposing parties. While a buyer and a seller may well settle on a different fair value midpoint than was agreed upon in Cause No. 39641, a comparison of those two midpoints would nevertheless be enlightening.

Based on the parties' agreement, we found in Cause No. 39641 that Indiana Cities had a fair value of $64,500,000, and an original cost depreciated of $49,267,623. Thus, the utility's fair value exceeded its original cost by approximately $15.2 million. We also determined that Indiana Cities capital structure included common equity of $19,892,258. Totaling the two figures, we see that less than two years before the acquisition, Indiana Cities'

common equity was arguably worth approximately $35.1 million. We realize that this figure may not precisely represent Indiana Cities's fair value at the time of the acquisition, due to changes in replacement costs, additional depreciated plant, and plant additions. However, we do suggest that in the future, acquiring utilities may want to perform similar comparisons to support the reasonableness of their purchase prices.

(E) **Finding on Acquisition Adjustment.** Based upon the evidence presented we find that the purchase price was reasonable and appropriate to include in Petitioner's fair value ratebase. However, we find it inappropriate to consider any above-the-line expense in Petitioner's income statement for ratemaking purposes. The only reason to do so would be to offset the rate result which would otherwise be indicated in an original cost jurisdiction to avoid confiscatory results if the involved transaction were reasonable. Here, we have given Petitioner authority to recognize 100% of its investment in rates through its fair value rate base. Thus, there is no confiscation concern to address through other means.

As a matter of policy, the Commission has determined that in assessing the reasonableness of an acquisition price the primary criterion to be used will be the fair value of the acquired utility as determined by the Commission in the most recent rate case for that utility. Any above the line adjustment will be consistent only if the acquired utility is small, troubled or if there are other special circumstances, all of which will lead to quantifiable benefits to the utility systems' customers due to the acquisition. Due to the increasing competitive environments for telephone and energy utilities and the special legislation available to such utilities, this above stated criterion will not be used to assess the acquisitions of such utilities.

7. **Operating Results Under Present Rates.**

A. **Revenue Adjustments.** In determining its pro forma financial results under its present rates, Petitioner calculated its adjusted total revenues to be $25,256,314. The OUCC did not challenge the test year level of revenues used by Petitioner for this case. Petitioner's pro forma revenue level, therefore, should be accepted for ratemaking purposes.

B. **Uncontested Operating Expenses.** Petitioner's case-in-chief suggested that Petitioner's adjusted test year Operation and Maintenance Expenses total $25,314,155. The OUCC agreed with some of the elements comprising that total and disagreed with others.

There were no material differences between Petitioner and the OUCC regarding test year adjustments for: chemical expense, management fees, group insurance and other group insurance, SFAS 106, pension expense, rate case expense, collection site fees,

lock box expense, customer billing and postage, uncollectible expense, general office expense, local operations expenses, cleaning expense, monthly meter reading expense, manpower expenses, lab expense, employee stock ownership program and 401(k) plan expense, rent expense, payroll taxes, regulatory fee, state gross income tax and property taxes.

OUCC witness Hineman initially questioned certain adjustments for purchased power and the Customer Service Center's telephone, data and radio line expense. On rebuttal, Petitioner's witness Martha Thornburg updated the purchased power expense adjustment pursuant to Mr. Hineman's recommendation and corrected errors in the calculation of the Customer Service Center's telephone, data and radio line expense. With these three exceptions, Ms. Thornburg accepted the remainder of Mr. Hineman's customer accounting adjustments. During cross-examination, Mr. Hineman indicated that he agreed and accepted the rebuttal testimony of Ms. Thornburg. Thus, the modifications to labor and labor related adjustments are contained in Petitioner's Ex.MGT-R1, Schedule 1. The amount of the updated purchased power expense adjustment is $181,446 as set forth in Petitioner's Corrected Ex. MGT-R1, Schedule 2. Pursuant to Petitioner's Ex. MGT-R1, Schedule 3, the adjustment for the Customer Service Center's telephone expense is $205,870. We find the adjustments recommended by Mr. Hineman, as modified by Ms. Thornburg's rebuttal testimony, should be accepted for ratemaking purposes in this Cause.

C. <u>Contested Operating Expense Adjustments</u>.

(1) <u>Moving Expenses</u>. Petitioner's adjusted test year moving expense was $81,477. Petitioner's witness Cutshaw derived this expense by multiplying the total number of employees moved during the test year and the 12 months following the test year by the average test year cost of moving an employee and amortizing that result over a three-year period. OUCC witness Dukes took exception to Indiana-American's inclusion of the employee moves related to the centralization of the Company's Customer Service Center, the merger and the relocation of the corporate office. Mr. Dukes excluded these costs, which he considered abnormal and nonrecurring in nature, in their entirety for ratemaking purposes and recommended that $50,200 be used as the adjusted test year moving expense based on the average number of "normal, recurring" employee moves.

During cross-examination, Petitioner's witness Cutshaw agreed that during the test year, there were a higher number of employee moves than will likely occur during the life of the rates set by this proceeding. Witness Cutshaw further agreed that 16, or a number very close thereto, of the 26 employee moves during the test year and the 12 months following were related to major changes in Indiana-American's corporate and physical structure during the test year.

The evidence indicates that the average level of moving expense calculated by Petitioner's witness Cutshaw increased due to the inclusion of an unusually high number of employee moves made during the test year and 12 months thereafter. We therefore find the Company's adjusted test year moving expense to be nonrepresentative of the Company's operations due to the inclusion of the unusually high number of employee moves related to the major changes in Indiana-American's corporate and physical structure during the test year. The Commission therefore finds that the OUCC's adjusted test year moving expense of $50,200 should be accepted for ratemaking purposes.

(2) **Miscellaneous Expenses.** OUCC witness Dukes proposed to eliminate $117,166 from Petitioner's test year operating expenses on the basis that this amount related to expenses that are not associated with the provision of utility service. Mr. Dukes also proposed the elimination of these expenses because Petitioner had presented no evidence establishing any connection between these costs and the provision of water service.

On rebuttal, Petitioner did not contest $24,468 of this amount. During cross-examination, Petitioner's president, Richard Hargraves, testified that Petitioner did not contest those expenses which it felt might be questionable or overly controversial. The remaining expenses in controversy related to Petitioner's service, safety and wellness programs, customer awareness charges, conservation, safety and water use programs and advertising, lobbying expenses, severance pay and death benefit expenses. The total amount of test year expenses which the parties disputed was $92,698. Of this amount, $38,876 related to the service and safety programs; $2,683 related to the wellness program; $1,792 related to an advertisement concerning cold weather procedures; $20,901 related to Company self-promotion and conservation information; $6,720 related to a theater group retained by the Company to present water use and conservation skits; $1,750 related to an exhibit regarding water usage and conservation; $2,527 related to death benefit and employee severance pay expense; and $17,449 related to lobbying expenses.

(a) **Service and Safety Programs.** Petitioner's adjusted test year operating expenses include $38,876 for service and safety awards. Petitioner's witness Hargraves testified that the Company's service and safety programs are the same programs which this Commission accepted in Cause No. 39215. Mr. Hargraves testified that the Company's safety program continues to mitigate accidents and reduce insurance costs. He also testified that the costs incurred by the Company to encourage safety and recognize employees for their safety achievements continued to be reasonable in amount. Mr. Hargraves admitted on cross-examination, however, that Indiana-American did not provide the Commission with any empirical evidence or analysis in this rate proceeding to demonstrate that the Company's safety program is successful in

terms of reducing Petitioner's accident rate, in terms of savings in lost work days or insurance payments, in terms of lower employee turnover or higher productivity, or in demonstrating that overall employee productivity or efficiency is affected by employee absenteeism.

The Commission is mindful that the burden of proving the accuracy and reasonableness of expenses for inclusion in rates is that of the Petitioner. The Commission recognizes, however, that the cost of satisfying that burden should not exceed the value of the expenditure either absolutely or relatively. Rather, the requisite evidence to satisfy the burden of proof for any expense item should bear a rational relationship to the magnitude and significance of the expense item being proved. More specifically, the resources expended to prove an expense item should never exceed the value of the expense item itself, and should always be congruous with the materiality of the expense item relative to the totality of expenses being considered.

Even though no empirical evidence was presented that service awards or safety programs had any effect on the Company's productivity or efficiency as a whole or in actual cost savings, Mr. Hargraves did offer testimony on the positive effects of these programs and the reasonableness of their cost. We know that analyses to evaluate the effectiveness of these types of programs can be difficult to formulate and expensive to monitor, and are often more subjective than objective. For these reasons, the cost of demonstrating their worthiness and reasonableness for inclusion in rates can often exceed their absolute value, and their value relative to more significant items in the rate case. We are also aware that the magnitude of expenses for service and safety programs relative to total expenses for operation and maintenance are less than one percent of the total, and therefore immaterial. These program expenses were accepted in Petitioner's previous rate proceeding, and we are persuaded to accept them in this case as well.

The Commission does caution the Petitioner against combining incompatible accounts into a single sum in the future, however. Service awards can certainly be viewed as part of a compensation package. Conversely, they can be perceived as gifts, which are not related to the delivery of utility services. Fortunately, the sum of the two accounts was deminimus and had no material effect on rates in this instance. If these accounts increase in magnitude and materiality in the future, however, it may become necessary to examine each individually. Continuing to combine them would frustrate our ability to adequately examine them, and could result in total disallowance.

(b) **Wellness Program.** The OUCC also proposed to eliminate expenses of $2,683 relating to the Company's Wellness Program. Mr. Hargraves testified that this program emphasizes

preventive health practices and was implemented in 1992 to attempt to reduce costs associated with health care without sacrificing employee benefits. The Wellness Program encourages participants to engage in exercise, improve their diets, attend wellness seminars and quit smoking. "Incentives" are awarded to participants as they achieve certain goals. The total cost of the incentives given to a participant who completes all stages of the program is approximately $86. The purpose of the Wellness Program is reduced health care costs resulting from fewer medical claims and less sick leave, and a better quality of life for employees. Mr. Hargraves explained that Indiana-American's insurance claims were reduced after the Wellness Program was implemented. He explained that prior to the implementation of the program, health insurance claims per employee averaged $503.23 for the period February through June of 1991. After the Wellness Program began in 1992, health insurance claims over the February, 1991 through January, 1992 period averaged $194.92 for "wellness employees" while non-wellness employees averaged $908.03 in paid claims per employee.

Mr. Hargraves stated during cross-examination that no new evidence has been presented in this Cause to demonstrate that the Company continues to have fewer medical claims and less sick leave as a result of the Wellness Program. Even so, we find Petitioner's evidence on its wellness program adequate to find that the expense should be allowed. Given the materiality of the expense item relative to total expenses, Petitioner has met its burden of proof on the issue.

(c) Advertising and Marketing. The OUCC challenged $31,163 of Petitioner's adjusted test year advertising and marketing expenses. Mr. Hargraves' rebuttal testimony defended those advertising and marketing expenses challenged by the OUCC. $1,792 was spent on an advertisement which informed customers how to handle cold weather to avoid frozen water pipes, pipe breakage, water leaks and customer inconvenience. $6,720 was spent on presentations to school groups to educate students about the importance of clean water, water use and conservation. Mr. Hargraves presented the results of teacher evaluations of the program demonstrating that the program had substantial educational value and stimulated classroom discussion. $1,750 was spent to educate customers about the importance of clean and safe water, water usage and conservation in association with an educational exhibit with the Minnetrista Cultural Center. Finally, Mr. Hargraves testified that $20,901 was spent on small "giveaways" at home shows where exhibits discussed the Company's operations, why additions to plant are made, conservation, winter freeze protection and leak detection. He explained that Company participation in home shows benefits the customers because it provides the Company a forum to educate customers and encourage demand-side management.

The OUCC generally opposed the above test year expenses, as the Petitioner's evidence failed to offer any substantiation of the

propriety and material benefit of those expenses, particularly with regard to "giveaways," which the OUCC noted were disallowed by this Commission in a prior Indiana-American proceeding in Cause No. 39215.

The recovery of advertising expenditures by a public utility through rates is governed by the Commission's rules at 170 IAC 1-3 et seq. 170 IAC 1-3-3 provides as follows:

> Sec. 3. Advertising Allowed.
>
> (A) No advertising expenditure of a public utility shall be taken into consideration by the Commission for the purposes of establishing rates unless such advertising will produce a material benefit for the ratepayers.

In determining whether advertising expenditures confer a material benefit on ratepayers, we are guided by 170 IAC 1-3-4 which defines the term "material benefit." Our reading of that provision leads us to find that Petitioner's proposed inclusion in rates of $1,792 for cold weather advertisements, $6,720 for presentations to school groups, and $1,750 for an educational exhibit should all be accepted, as those expenditures appear to satisfy the education criterion of the definition of "material benefit." We further find that the inclusion in rates of $20,901 to reflect sums spent by Petitioner at home shows should not be allowed, because the cost of giveaways included in that amount was not demonstrated to be of material benefit to ratepayers. While we might consider the cost of the booth an appropriate educational expense, Petitioner's evidence did not break out that cost as a separate element, leaving us no choice but to disallow the entire $20,901.

(d) **Death Benefits and Severance Pay.** OUCC witness Dallas Dukes proposed elimination of $5,055 in miscellaneous expenses related to death benefits and employee severance pay. Petitioner witness Hargraves testified that these costs are reasonable and necessary business expenses and objected to their exclusion for ratemaking purposes. He explained that although Indiana-American may not incur these exact miscellaneous expenses each year, experience demonstrates that the Company does incur expenses that are similar in nature and magnitude each year. In an attempt to be conservative, witness Hargraves proposed to include only half ($2,527) of the test year expenses related to miscellaneous expenses of this nature. Mr. Hargraves testified that this amount would then be representative of the minimum level Indiana-American will experience in the future period during which the rates fixed in this proceeding will be in effect.

The OUCC did not challenge the reasonableness of the expense related to these benefits. According to the testimony of witness

Hargraves, these expenses are non-recurring in nature inasmuch as Indiana-American does not expend funds each and every year for death benefits or employee severance pay. It is reasonable to expect that the minimum level of $2,527 will continue to be incurred by the Petitioner, however. We will also note once again that the materiality of the adjustment proposed suggests that it has already received more time and attention by the Petitioner and the OUCC than was warranted under the circumstances. We therefore find that Mr. Hargraves' proposal of $2,527 should be accepted, and that Mr. Dukes' proposed elimination of death benefits and severance pay in the amount of $5,055 should be rejected.

(e) **Lobbying Expenses.** Mr. Dukes proposed to exclude $17,449 in lobbying expenses. On rebuttal, Mr. Hargraves testified that Petitioner incurs lobbying expenses from the National Association of Water Companies ("NAWC") of which Petitioner is a member. These expenses relate to working with Congress on such issues as the elimination of taxes on Contributions in Aid of Construction ("CIAC"). Taxes on CIAC for water utilities are a significant expenditure, the elimination of which would reduce cost and thereby benefit customers. Mr. Hargraves explained the NAWC also works to ensure revisions to the Safe Drinking Water Act. Mr. Hargraves believes such efforts are beneficial to customers because the cost of complying with environmental laws and regulations is a significant expense for water companies. He stated that such efforts seek to ensure safe drinking water while mitigating costs. Mr. Hargraves testified that the lobbying expenses help the Company maintain current knowledge of water utility trends and problems, and help the Company control environmental regulation and taxation on both a state and federal level.

In previous cases we have stated "[a]s with advertising expenses the Commission standard for inclusion or exclusion of lobbying expense is based upon proof of material benefit to the ratepayers." Boone County REMC (IURC 2/1/95), Cause No. 39929. We are not persuaded by Mr. Hargraves' rebuttal testimony that the lobbying expense at issue in this case produced a material benefit. While the lobbying goals of the NAWC may well result some day in a material benefit to ratepayers, Petitioner could point to no changes in the Safe Drinking Water Act or the tax treatment of CIAC that benefit ratepayers at this time. Accordingly, we find that the OUCC's proposed elimination of this $17,449 expense should be accepted.

(3) **Depreciation, Amortization and Maintenance Expense.** The Petitioner originally proposed adjusted test year expenses of $6,984,723 for depreciation and $548,500 for amortization expenses. The OUCC proposed different amounts due to differences in the parties' positions on tank painting and the acquisition adjustment.

With regard to tank painting, the OUCC proposed to eliminate $29,244 of maintenance expense and $31,485 of depreciation expense related to tank painting and depreciation periods that would expire during the adjustment period. Petitioner did not contest this part of the OUCC's testimony, and we find this part of the OUCC's proposal should be accepted.

The OUCC also proposed to reclassify tank painting depreciation as maintenance expense and to extend from 10 to 15 years the amortization period for the Greenwood and Noblesville tank paintings, and all future tank paintings. As we will discuss later, we reject the OUCC's proposals, and therefore find that no related adjustment should be made to Petitioner's adjusted test year depreciation and amortization expenses.

$113,200 of Petitioner's adjusted test year amortization expense of $548,500 was not disputed by the OUCC, because it relates to the acquisition adjustment granted Indiana Cities in 1967. The remaining $435,300 represents the annual amortization expense for Petitioner's proposed acquisition adjustment of $17,412,009. We have previously found, Finding 6(E), that Petitioner will not be allowed to amortize its acquisition adjustment associated with the purchase of Indiana Cities Water Corporation as an above-the-line operating expense.

As a result of our findings above, we also find Petitioner's adjusted test year depreciation expense to be $6,953,238.

(4) **Income Taxes.** Indiana-American's and the OUCC's income tax calculations differed. During cross-examination, Mr. Dukes admitted that his income tax calculation failed to properly reflect his recommendations that the Company's tank painting costs be removed from rate base and the annual amortization be reclassified from depreciation expense to maintenance expense, and this caused the OUCC's recommended rate increase to be too low. However, since we find herein that the undepreciated and unamortized tank painting costs at issue should be included in rate base and the balance in utility plant should be depreciated, we find that these costs should be reflected in the interest synchronization methodology.

The OUCC and Indiana-American also used different methodologies to compute interest synchronization. Indiana-American used an interest synchronization rate of 4.13% to determine the amount of interest expense to reflect in the income tax calculation. (Petitioner's Ex. JLC-R3, page 2) OUCC witness Dukes used an interest synchronization rate of 4.14%. (Public's Ex. 1, Schedule 7, p. 1) The difference between the two rates related to the calculation of the cost rate of Job Development Investment Tax Credits ("JDITC") utilized in the determination of the cost of capital.

Mr. Cutshaw testified that Indiana-American's calculation utilized the items in the capital structure which are considered investor-supplied capital, namely long-term debt, preferred stock, and common equity as well as zero cost capital such as deferred taxes. (Petitioner's Ex. JLC, p. 11) He explained that the methodology he used has been utilized by the Company and approved by this Commission in the last several rate cases. Id. Unlike Mr. Cutshaw, Mr. Dukes included post-1970 JDITC in his calculation and computed a cost rate for it and excluded zero cost capital such as deferred taxes. The OUCC's computation of a cost rate for JDITC produces higher pro forma operating income at present rates and understates the need for an increase in rates.

In Indiana-American Water Co. (IURC 2/2/94), Cause No. 39595, pp. 23-24, we rejected the calculation of a cost rate for JDITC. Therein, we explained that the Company's interest synchronization methodology follows the procedure established in Indianapolis Power & Light Company (PSCI 8/6/86), Cause No. 37837. Under that procedure, JDITC is removed from the capital structure for purposes of determining the weighted cost of debt used in the interest synchronization calculation. In Cause No. 39595, we found that the Commission has accepted Indiana-American's interest synchronization rate, calculated in the same manner, to determine interest expense in Petitioner's last three rate orders. In this case, Indiana-American has again utilized the same procedure to compute interest synchronization. Mr. Dukes offered no explanation justifying his proposed change from the Commission's established procedure. We find that Mr. Dukes' proposal should be rejected and an interest synchronization rate of 4.13% should be used in the income tax calculations.

Accordingly, we find that Petitioner has adjusted test year federal and state income taxes of $3,582,011 and $712,172 respectively.

(5) **Total O&M Expenses**. As a result of our findings above, we find that Petitioner's adjusted test year O&M expenses are $25,186,687, as indicated below:

Petitioner's Proposed Adjusted		
	Test Year O&M Expense	$25,256,314
Less:	Home Shows	20,901
	Lobbying	17,449
	Moving Expenses	31,277
Adjusted Test Year O&M Expenses		$25,186,687

D. Net Operating Income At Present Rates. Based upon the evidence and findings above, we find that Petitioner's adjusted operating results under its present rates are as follows:

PROFORMA INCOME STATEMENTS AT PRESENT RATES	Crawfordsville	Franklin	Greenwood	Jeffersonville	Kokomo	Muncie
Operating revenues	$1,477,131	$1,331,932	$3,483,024	$3,590,213	$9,118,695	$9,234,430
O & M expenses	$817,838	$607,775	$1,578,391	$2,240,472	$3,264,325	$3,655,322
Depreciation	106,347	133,835	372,145	271,684	1,495,365	1,176,257
Amortization	1,590	3,247	8,637	4,480	41,751	8,084
Other taxes	115,986	118,465	274,303	372,898	651,106	968,572
State income tax	17,020	15,888	41,403	26,678	108,457	137,208-
Federal income tax	88,225	74,732	199,035	76,997	552,318	675,322
Total Operating Expenses	$1,147,005	$953,942	$2,473,914	$2,993,210	$6,113,322	$6,620,766
Net Operating Income	$330,126	$377,990	$1,009,110	$597,003	$3,005,373	$2,613,664

PROFORMA INCOME STATEMENTS AT PRESENT RATES	New Albany	Newburgh	Noblesville	Richmond	Seymour	Shelbyville
Operating revenues	$3,152,463	$1,089,267	$1,432,110	$6,170,441	$2,521,815	$2,160,346
O & M expenses	$2,172,235	$647,621	$628,476	$2,674,872	$1,071,617	$901,956
Depreciation	257,934	87,019	147,656	720,627	389,650	207,720
Amortization	4,038	1,362	1,212	4,644	5,259	1,682
Other taxes	303,705	85,922	145,938	580,775	140,195	159,184
State income tax	11,258	9,220	20,270	89,229	30,140	33,148
Federal income tax	(16,109)	39,690	100,839	465,192	178,309	191,788
Total Operating Expenses	$2,733,061	$870,835	$1,044,391	$4,535,339	$1,815,170	$1,495,479
Net Operating Income	$419,402	$218,432	$387,719	$1,635,102	$706,645	$664,867

PROFORMA INCOME STATEMENTS AT PRESENT RATES	Somerset Water	Somerset Sewer	Summitville	Wabash	Wabash Valley	Total Company
Operating revenues	$30,462	$29,664	$120,261	$1,214,501	$10,637,717	$56,794,472
O & M expenses	$23,146	$18,052	$96,957	$740,080	$4,047,550	$25,186,687
Depreciation	3,127	3,080	5,652	87,393	1,487,747	6,953,238
Amortization	29	29	121	1,357	25,678	113,200
Other taxes	2,784	2,306	11,979	94,586	824,383	4,853,087
State income tax	44	293	161	9,996	161,759	712,172
Federal income tax	(547)	1,399	(1,719)	43,245	913,295	3,582,011
Total Operating Expenses	$28,583	$25,160	$113,151	$976,657	$7,460,411	$41,400,395
Net Operating Income	$1,879	$4,504	$7,110	$237,844	$3,177,306	$15,394,077

In summary, we find that, with appropriate adjustments for ratemaking purposes, Petitioner's annual net operating income under its present rates for water service would be $15,394,077.

8. **Fair Value Rate Base**. The Prehearing Conference Order provides that the cut-off date for determining the value of Petitioner's rate base should be December 31, 1994. The evidence establishes that Petitioner's water and sewer utility properties reflected on its books as being in service at December 31, 1994, are actually devoted to providing water and sewer utility service and are therefore necessary. The Commission finds that such properties are well maintained and in good operating condition; reasonably necessary for the efficient and reliable maintenance of service; operated in an efficient and economical manner; and used and useful in providing water and sewer utility service to the public.

A. **Original Cost**. There was no difference in the evidence of Petitioner and the OUCC as to the quantification of the original cost of Petitioner's water and sewer utility property except with respect to the treatment of the acquisition adjustment previously discussed, deferred depreciation, and tank painting.

(1) **Deferred Depreciation**. Indiana-American accrues post-in-service allowance for funds used during construction and defers depreciation expense on certain construction projects pursuant to our orders in Cause Nos. 39924 and 39935 through the date of an order reflecting the projects in rate base. The OUCC accepted the inclusion of the depreciation deferred through December 31, 1994, the rate base cutoff date, but opposed Indiana-American's pro forma adjustment to rate base for deferred depreciation to the extent it related to the period January 1, 1995 through December 31, 1995. OUCC witness Gassert stated that a rate base adjustment for deferred depreciation after December 31, 1994 is unnecessary because the Company's depreciation reserve as of that date does not reflect post-test year depreciation on these projects.

The Company believes its adjustment complies with the terms of the prehearing conference order agreed to by the OUCC and approved by the Commission. The prehearing conference order (p. 2) provides:

> The cutoff for accounting and engineering evidence to be presented for determining the original cost and fair value of Petitioner's utility plant used and useful in furnishing service to the public should be December 31, 1994, except that adjustments may be made for post-in-service allowance for funds used during construction ("AFUDC") and deferred depreciation as described in Paragraph 13.

Paragraph 13 (p. 4) of the prehearing conference order provides:

> For purposes of this proceeding, Petitioner may adjust its rate base for post-in-service AFUDC and deferred depreciation relating to the projects placed in service by December 31, 1994 from the in-service dates of the projects through the estimated date of a final order in this Cause.

Nevertheless, we believe Mr. Gassert has made a legitimate point. The purpose of including deferred depreciation in rate base is to offset the increase in the depreciation reserve relating to the period after the projects were placed in service. Since the prehearing conference order provides for the inclusion of post-test year deferred depreciation in rate base, we find that the accumulated provision for depreciation used for rate base purposes should be increased by a like amount ($538,204) in order to maintain the balance between the reserve and the deferred depreciation.

(2) Tank Painting. Indiana-American has recorded the cost of tank paintings as a utility plant asset and depreciated the asset over the expected life of the painting of 10 years. Under this approach, the undepreciated cost of the tank painting is included in the utility's original cost rate base and the annual depreciation is treated as a component of depreciation expense.

OUCC witnesses Dallas Dukes and Kyle Hamm challenged Indiana-American's treatment of tank painting costs. Mr. Dukes and Mr. Hamm recommended that the Commission require Indiana-American to amortize the cost of tank paintings in the Greenwood and Noblesville operations and all future tank paintings over an estimated 15 year life without including any return to the Company for carrying charges on the unamortized balance. The longer amortization period recommended by Mr. Hamm was based on the maximum life expectancy for a majority of the painted surfaces of the tank and would result in a decrease to depreciation expense of $9,321. Mr. Dukes also proposed to reclassify from utility plant to a deferred debit the net amount of tank painting previously recorded and to reclassify the depreciation thereon as maintenance expense. In addition, Mr. Dukes proposed to eliminate the tank painting costs associated with the former Indiana Cities' operations which had been identified by Petitioner as capitalized tank painting. Mr. Dukes and Mr. Hamm believed the OUCC's proposal was appropriate because: (i) Indiana-American's tank painting costs did not satisfy the criteria for rate base recognition of tank painting expense contained in a National Association of Regulatory Utility Commissioners ("NARUC") Interpretation of the Uniform System of Accounts; (ii) the inclusion of tank painting in rate base is "inapplicable in this jurisdiction" (Public's Ex. 1, p. 8); and (iii) the recovery of these costs for ratemaking purposes

should match the expected life of the paint instead of being expensed 100% in one year.

On rebuttal Indiana-American's Director of Rates and Revenues, Mr. James L. Cutshaw, demonstrated why he believed Indiana-American's tank painting expense did satisfy NARUC criteria for rate base treatment of tank painting costs. Mr. Cutshaw also showed that this Commission has recognized rate base treatment of such costs for other water utilities in Indiana. Mr. Cutshaw testified that the OUCC's proposed ratemaking treatment will cause Indiana-American to lose the ability to recognize the financing costs associated with the Company's investment in tank paintings. He also explained that the Company's ratemaking and accounting treatment for tank painting presented in this proceeding is the same as that used in Indiana-American rate cases dating back to Cause No. 36898 dated December 22, 1982.

This Commission discussed the inclusion of unamortized tank painting costs in rate base in Hoosier Water Co., Inc. (IURC 1/15/92), Cause Nos. 39036 and 37 (pp. 3-4) and West Lafayette Water Co. (IURC 10/9/91), Cause No. 39038 (pp. 3-4) (and the cases cited therein). In approving the rate base treatment of these costs in these cases, we recognized that the water utility would lose the financing costs related to these investments if the unamortized tank painting costs are not included in rate base. We also found the inclusion of these deferred costs in rate base were consistent with the NARUC Interpretation referred to above.

The NARUC Interpretation recommends that tank painting expense be (i) expensed 100% in the year in which it is incurred; or (ii) amortized over the estimated period of time between tank paintings with the unamortized portion of the investment included in rate base. The rationale for the two ratemaking treatments recognizes the size of the water utility involved as well as the significance of the expense. The NARUC Interpretation, included as an attachment to Mr. Dukes' testimony, explains as follows:

> In large water utility operations serving various communities with a number of storage facilities, management is in the position of scheduling painting of such facilities so as to normalize such maintenance expenses from year to year. In small utilities serving one community or having a small number of storage facilities, painting as a maintenance expense not only constitutes a major expenditure as compared to the original cost of such plant, but often very significantly effects the overall operating results if such expenditures are charged to expense in the year incurred.

OUCC witness Dukes did not consider Petitioner's tank painting costs to be significant in relation to the test year O&M expense for the entire Company. On a total Company basis, Mr. Dukes showed that the cost of the Greenwood tank painting was approximately .56% of total test-year O&M and the Noblesville tank painting expense was .53% of total test year O&M. The OUCC did not present evidence concerning the significance of the expense in relation to the original cost of the tanks.

Petitioner's witness Cutshaw disagreed with Mr. Dukes that it was appropriate to compare an expense of one local operation to total Company O&M for the test year. Mr. Cutshaw testified the $142,881 associated with the Greenwood tank painting and the $136,732 expense associated with the Noblesville tank painting are major expenditures for those operations. Mr. Cutshaw explained that while Petitioner serves numerous communities throughout Indiana, total Company uniform pricing has not been approved by this Commission. He explained that, due to the small number of tanks within each community, Petitioner is not in a position where it can attempt to normalize the impact of tank painting expenditures by painting tanks pursuant to a regular schedule and expensing the item 100% during the year of the painting.

Although the Company operates on a consolidated basis in many respects, the Commission has required that capital investments and the costs associated with maintaining or extending the life of such investments be allocated wholly to the communities in which the investment is made. Because the tank painting expense incurred in a given community directly impacts the rates in that community, we agree with Mr. Cutshaw, that the significance of the tank painting costs should be judged based upon the individual local operations. In this light, the tank painting costs are significant. As demonstrated by Mr. Cutshaw the capitalized tank painting cost for Greenwood is almost 10% of test year O&M expense and over 12% of the net operating income for the Greenwood operation. The capitalized tank painting cost for Noblesville is 23% of test year O&M expense and 29% of net operating income for the Noblesville operation. If such expenditures were charged to expense in the year incurred for ratemaking purposes, the expense would significantly impact the operating results and rates for these individual communities. Mr. Cutshaw also demonstrated that the cost of the tank paintings was significant in comparison to the original cost of the facilities. He showed the capitalized cost of the Greenwood tank painting represents 105% of the original cost of the tank and the capitalized cost of the Noblesville tank painting represents 121% of the original cost of the tank.

Neither the OUCC nor Indiana-American proposed to expense 100% of the tank painting expense in the test period. Based on the evidence before us in this Cause, we believe such treatment would distort test year operating results in the Greenwood and Noblesville operations. The evidence herein demonstrates that tank

painting expense is a major expense that prevents rust and corrosion and thereby inhibits the deterioration of a tank. The benefits of tank painting exist for more than one year. Therefore, it is reasonable to mitigate the impact of this expense by extending the recognition of this cost for ratemaking purposes. We have stated before that if the improvement lasts for several years and it is not one of regular maintenance and it serves to extend the life of the capital asset or the life of the improvement itself is of a long-term nature, matching the recovery of the cost to the life of the improvement or the extension of the life of the capital asset is appropriate. (Indianapolis Water Co. (IURC 8/10/94), Cause No. 39713.) The evidence in this proceeding supports the conclusion that tank painting expense is not an ordinary repair.

Where a water utility has already incurred the tank painting costs and recognition of 100% of the expense in the test period would distort operating results, we have approved the inclusion of the unamortized balance in rate base. Hoosier Water Co. (IURC 1/15/92), Cause Nos. 39036 and 39037 (pp. 3-4) and West Lafayette Water Co. (IURC 10/9/91), Cause No. 39038 (pp. 3-4). Although these orders include tank repainting costs in rate base as a deferred debit rather than as an item directly capitalized to utility plant in service, the effect for ratemaking purposes is exactly the same in either case. The OUCC's proposal is not recognized by the NARUC Interpretation and would prevent the Company from recognizing the full costs of this necessary expenditure for providing water utility service for ratemaking purposes. If the ratemaking recognition of such costs is deferred, the Company should be compensated for carrying this investment on its books.

Mr. Hamm recommends the Commission extend the projected life of the paint from 10 years to 15 years. Mr. Hamm based his recommendation on a report prepared by Tank Industry Consultants ("TIC") for Indiana-American. Mr. Hamm testified that this report indicated the average life of an epoxy based paint system for both the exterior and wet interior is 12 to 15 years. Mr. Hamm testified the report indicated the average life of an epoxy based paint system for the dry interior is 15 to 20 years. During cross-examination Mr. Hamm agreed that a greater portion of the tank would fall into the 12 to 15 year projected life. Based on the evidence presented in this Cause, the 15 year amortization period is the maximum life expectancy for a majority of the paint systems at issue. Mr. Hamm indicated the greater use of epoxy-based paint is a relatively new practice. Thus, there is no track record available to us to determine whether the actual life of the paint is closer to the minimum or maximum life expectancy. From the evidence presented, we find that the 10 year average life presently used by Petitioner is reasonable and should continue to be used.

We further find that the Company's capitalization of tank painting costs to utility plant in service is an acceptable

accounting procedure. This approach is consistent with the approach used in our five previous Indiana-American rate orders, and we find it reasonably compensates Petitioner for its cost of painting tanks. Therefore, we find the Company's proposed accounting and ratemaking treatment for the cost of tank painting should be approved.

(3) Conclusion On Original Cost. Based on the evidence and our previous findings, the Commission finds that the original cost of Petitioner's water and sewer utility property used and useful for the convenience of the public is as follows:

ORIGINAL COST RATE BASE	Crawfordsville	Franklin	Greenwood	Jeffersonville	Kokomo	Muncie
Utility plant in service	$5,864,488	$7,690,797	$20,958,744	$14,928,736	$47,223,155	$38,659,049
Utility plant-Capital lease	3,590	3,032	7,760	10,113	12,400	18,244
Capitalized tank painting	67,083	54,774	0	262,887	0	0
Deferred depreciation	0	36,228	63,951	0	698,386	0
AFUDC	0	103,752	197,714	0	1,009,493	0
Less: Accum. depreciation & amortization	(1,131,161)	(891,440)	(2,743,202)	(2,847,093)	(6,202,728)	(8,576,286)
Less: Amort. of tank painting	(41,927)	(41,735)	0	(35,866)	0	0
Less: Def. dep. amortization	0	0	0	0	(15,553)	0
Less: AFUDC amortization	0	0	0	0	(37,864)	0
Net utility plant	$4,762,073	$6,955,408	$18,484,967	$12,318,777	$42,687,289	$30,101,007
Less: CIAC	(1,176,408)	(1,386,036)	(3,174,930)	(2,656,564)	(1,049,209)	(1,553,405)
Less: CAFC	(165,150)	(321,901)	(1,029,160)	(195,687)	(153,790)	(1,085,302)
Add: Acquisition adjustment (prior order)	205,632	152,864	0	414,800	0	0
Add: Materials and supplies	37,204	30,967	79,276	46,210	132,290	168,146
Total Rate Base	$3,663,351	$5,431,302	$14,360,153	$9,927,536	$41,616,580	$27,630,446

ORIGINAL COST RATE BASE	New Albany	Newburgh	Noblesville	Richmond	Seymour	Shelbyville
Utility plant in service	$14,190,251	$4,806,210	$7,791,441	$22,561,486	$11,680,870	$11,471,159
Utility plant-Capital lease	9,117	3,075	2,736	10,485	3,940	3,798
Capitalized tank painting	22,349	0	0	0	0	0
Deferred depreciation	0	0	0	0	121,104	0
AFUDC	0	0	0	0	93,795	0
Less: Accum. depreciation & amortization	(3,064,298)	(743,196)	(827,911)	(5,692,970)	(2,219,788)	(1,206,971)
Less: Amort. of tank painting	(15,831)	0	0	0	0	0
Less: Def. dep. amortization	0	0	0	0	0	0
Less: AFUDC amortization	0	0	0	0	0	0
Net utility plant	$11,141,588	$4,066,089	$6,966,266	$16,879,001	$9,679,921	$10,267,986
Less: CIAC	(1,829,566)	(621,113)	(2,078,495)	(1,021,115)	(1,379,295)	(3,000,131)
Less: CAFC	(218,509)	(313,283)	(282,988)	(168,270)	(143,043)	(206,876)
Add: Acquisition adjustment (prior order)	522,240	0	85,408	0	0	178,976
Add: Materials and supplies	41,642	23,929	37,364	101,686	67,123	45,564
Total Rate Base	$9,657,395	$3,155,622	$4,727,555	$15,791,302	$8,224,706	$7,285,519

ORIGINAL COST RATE BASE	Somerset Water	Somerset Sewer	Summitville	Wabash	Wabash Valley	Total Company
Utility plant in service	$175,815	$173,108	$303,994	$4,859,692	$42,935,005	$256,274,000
Utility plant-Capital lease	66	66	274	3,064	17,684	109,444
Capitalized tank painting	0	0	0	95,603	0	502,696
Deferred depreciation	0	0	0	0	208,744	1,128,413
AFUDC	0	0	0	0	351,508	1,756,262
Less: Accum. depreciation & amortization	(69,581)	(69,471)	(98,758)	(1,143,654)	(8,819,030)	(46,347,538)
Less: Amort. of tank painting	0	0	0	(58,345)	0	(193,704)
Less: Def. dep. amortization	0	0	0	0	(27,373)	(42,926)
Less: AFUDC amortization	0	0	0	0	(46,107)	(83,971)
Net utility plant	$106,300	$103,703	$205,510	$3,756,360	$34,620,431	$213,102,676
Less: CIAC	(27,056)	(1,074)	(5,081)	(414,988)	(2,134,492)	(23,508,958)
Less: CAFC	0	0	0	(105,279)	(1,445,469)	(5,834,707)
Add: Acquisition adjustment (prior order)	0	0	432	0	0	1,560,352
Add: Materials and supplies	549	543	2,421	26,983	214,998	1,056,895
Total Rate Base	$79,793	$103,172	$203,282	$3,263,076	$31,255,468	$186,376,258
Less: Capacity adjustment	(31,169)	(65,683)	0	0	0	($96,852)
Net Rate Base	$48,624	$37,489	$203,282	$3,263,076	$31,255,468	$186,279,406

B. **Fair Value**. Indiana Code § 8-1-2-6 establishes that this Commission shall value a public utility's property at its "fair value". In Indianapolis Water Co. v. Public Serv. Comm'n (1985), Ind. App., 484 N.E.2d 635, the Indiana Court of Appeals confirmed that a utility should be entitled to earn a fair rate of return on the fair value of its rate base. The Court gave the Commission the following four basic directives regarding the concept of "fair value":

> (1) It is upon the statutory "fair value" of its used and useful property that a utility should be allowed to earn a return.
>
> (2) "Fair value" is not an either/or situation as to original cost or reproduction cost new, but "fair value" is a conclusion or final figure, drawn from all the various values or factors to be weighed in accordance with the statute by the Commission.
>
> (3) In its determination of "fair value" the Commission may not ignore the commonly known and recognized fact of inflation.
>
> (4) While original cost is one of the factors which the Commission should consider in arriving at a "fair value" figure, it is not necessarily, in and of itself an accurate reflection of the "fair value" of the Company's property.

In the Indianapolis Water Co. case, the Court of Appeals reaffirmed the holding in Public Serv. Comm'n v. City of Indianapolis (1956), 235 Ind. 70, 131 N.E.2d 308, 325, that "reproduction cost new cannot be disregarded in fixing a valuation for rate making purposes." The Court of Appeals expressly stated that this observation is as pertinent today as in 1956. The Court of Appeals recently confirmed that the Commission must authorize rates that provide the utility with the opportunity to earn a fair rate of return on the fair value of its property. Gary-Hobart Water Corp. v. Office of Util. Consumer Counselor (1992), Ind. App., 591 N.E.2d 649, 653-654, transfer denied; Office of Util. Consumer Counselor v. Gary-Hobart Water Corp. (1995), Ind. App., 650 N.E.2d 1201.

(1) **Reproduction Cost New Less Depreciation**. A valuation of the reproduction cost new less depreciation ("RCNLD") of Petitioner's utility property was sponsored by Petitioner's witness Shutt, a registered professional engineer and President of FBA Environmental, Inc. Mr. Shutt has extensive experience in the planning, design and operation of water and wastewater facilities

and the valuation of utility property. From 1981 to 1987 Mr. Shutt was employed by Indiana Cities. He performed an RCNLD study of Indiana Cities' utility property as of December 31, 1992 in its last rate case and performed similar studies in other rate cases of Indiana Cities.

RCNLD represents the cost of reproducing the existing system at present day costs, reduced for the loss in value due to wear and tear, obsolescence and lack of use. Mr. Shutt determined the reproduction cost new of Petitioner's utility property by applying cost trend factors to the original cost by vintage year of the various components of Petitioner's property. Mr. Shutt testified that the primary source for the trend factors used in the study was the Handy-Whitman Index of Public Utility Construction Costs for Water Utilities located in the North Central United States. Mr. Shutt said that when compared and checked with current costs actually experienced by the Company, the resulting cost trends were shown to be satisfactory and reliable to use in the determination of the reproduction cost new of Petitioner's water utility property. Mr. Shutt determined the RCNLD by deducting depreciation necessary to reflect the current condition of the property. The method used by Mr. Shutt is well accepted and recognized by the Commission and the Courts. Hancock Rural Tel. Co. v. Public Serv. Comm'n (1964), 137 Ind. App. 14, 201 N.E.2d 573, 586; City of Terre Haute v. Terre Haute Water Works Corp. (1962), 133 Ind. App. 232, 180 N.E.2d 110, 113; Southern Ind. Gas and Elec. Co. (PSCI 9/27/79), Cause No. 35528, 31 PUR4th 505, 518; Indiana Cities Water Corp. (IURC 7/8/92), Cause No. 39166, p. 33.

The RCNLD of Petitioner's used and useful utility property as of December 31, 1994, as shown by the valuation, exclusive of materials and supplies and certain other items hereafter identified, is as follows:

Location	RCNLD
Crawfordsville	$13,112,254
Franklin	13,212,090
Greenwood	29,312,860
Jeffersonville	30,314,286
Kokomo	81,313,867
Muncie	77,238,374
New Albany	35,838,666
Newburgh	7,251,344
Noblesville	11,803,259
Richmond	63,963,413
Seymour	19,833,688
Shelbyville	18,067,264
Somerset Sewer	530,430
Somerset Water	424,104
Summitville	813,145
Wabash	13,468,033
Wabash Valley	79,687,406
Corporate	3,415,803
Total	**$499,600,286**

(Petitioner's Ex. JWS, p. 27)

The OUCC did not submit its own valuation of the RCNLD of Petitioner's utility property, or challenge Mr. Shutt's study. The Commission finds that Petitioner's estimation of the RCNLD of its utility property of $499,600,286, broken down as described above, has been fully supported by evidence of record and should be accepted.

(2) Replacement Cost. Evidence as to the replacement cost of Petitioner's property was provided by Petitioner's witness Boquist. Dr. Boquist testified that the fair value of Indiana-American's property should represent the depreciated replacement cost of the property. Dr. Boquist stated that this definition captures the opportunity costs associated with allowing a firm to control its assets for the production of goods and services according to its strategy. Any strategy that produces a value less than the assets' replacement cost should be abandoned, and the assets dedicated to other opportunities. The replacement cost concept is utilized in the "Tobin's q" ratio which is defined as the market value of a firm's assets divided by their replacement cost. Under this theory, a firm should continue to invest as long as the q ratio is greater than or equal to 1.0. Dr. Boquist stated that this approach would encourage the productive and efficient use

of utility property and assist well-managed utilities to attract capital on reasonable terms.

Dr. Boquist determined the replacement cost of Indiana-American's property as of December 31, 1994 by reducing Mr. Shutt's RCNLD valuation by 2% per year, the long-run average rate of change in manufacturing productivity as reported by the U.S. Bureau of Labor Statistics. The result was a replacement cost amount of $303,571,716. (Petitioner's Ex. JAB, pp. 37-38) Dr. Boquist stated this replacement cost value was conservative because the rate of technological change in the water industry is probably less than 2% and because some technological change factors were already reflected in the RCNLD study.

The OUCC submitted no evidence as to the replacement cost of Petitioner's property.

(3) **Conclusion on Fair Value**. Although the OUCC did not offer its own estimates for either RCNLD or the replacement cost of Petitioner's property, it did challenge the results of the replacement cost methodology applied by Dr. Boquist to determine fair value. Dr. Boquist indicated that the fair value of Indiana-American's property was represented by its depreciated replacement cost. Dr. Boquist adjusted his replacement cost value of $303,571,716 for rate base items not included in the RCNLD valuation (capital leases, capitalized tank painting, deferred depreciation, post-in-service AFUDC and materials and supplies) to arrive at a replacement cost amount of $307,665,180 (Petitioner's Ex. JAB-7), which Petitioner also considered the property's fair value.

On pages 41 and 42 of his direct testimony, Dr. Boquist applied the same replacement cost methodology used to derive Indiana-American's fair value to the Indiana Cities utility properties. These calculations indicated a final fair value estimate for Indiana Cities of $97,469,069. Even though Dr. Boquist originally opined that ". . . Indiana American should be permitted the opportunity to earn a return of and return on its investment to acquire Indiana Cities because that investment represents both the cost to acquire utility properties which has been incurred by the company and the fair value of the acquired properties." (p. 41, lines 8-11, emphasis added), he testified on cross examination that his technique for estimating fair value was more accurate than the purchase price (direct transcript JAB-57), and stated on redirect that fair value could be more than the purchase price (Id. JAB-59). We agree with Dr. Boquist that fair value can exceed purchase price for utilities that partially finance their rate base with debt. We are not completely convinced of the accuracy of his methodology for estimating fair value, however. Even though his technique produces a value that exceeds the purchase price paid, the resulting value still exceeds the fair value finding of $67,700,000 found in Petitioner's last litigated

rate case, Cause No. 39166, plus the net plant additions that have occurred since that time of approximately $16,050,000, for a total estimated fair value of $83,750,000. The difference between Petitioner's calculated fair value and the value derived from the last litigated rate case is almost $14,000,000. We also note that the litigated fair value finding in Cause No. 39166 is greater than the stipulated value in Indiana Cities last rate case of $64,500,000, Cause No. 39641.

Based on the results of our own analysis of findings in prior orders and the evidence contained in this case, we are reluctant to rely on Petitioner's methodology for establishing depreciated replacement cost and fair value. Petitioner's replacement cost estimate for Indiana Cities, which is almost $14,000,000 or 16% more than our recalculated figure, suggests that the methodology may significantly overestimate fair value. We cannot be sure exactly why this occurred; the OUCC satisfied its evidentiary burden on this matter by merely drawing attention to that which the Commission could observe for itself, i.e., Petitioner's fair value estimate for the Indiana Cities properties materially exceeded its purchase price. Once Petitioner had presented its prima facie case, the OUCC had the burden of going forward. The Commission would have found it far more useful and persuasive for the OUCC to meaningfully critique Petitioner's methodology for estimating fair value, and offer alternative evidence of its own for the Commission to consider. It is apparent that Petitioner's methodology overestimated Indiana Cities' fair value. The question that never got answered was why.

Because the OUCC did not present any of its own estimates for the fair value of Indiana American's properties, we are once again forced to deal with the issue as best we can. We are not prepared to abdicate our statutorily mandated duty by simply equating fair value with original cost as advocated by the OUCC, especially in light of our treatment of the acquisition issue above. Although Petitioner provided estimates for the fair value of its utility properties, we are unconvinced that its estimating techniques are sound. Applying the same analysis used to derive an alternative estimate for the fair value of the Indiana Cities properties to Indiana American also yields a lower estimate. Adding net plant additions occurring since Petitioner's last rate case, Cause No. 39595, of approximately $11,321,000 to the fair value finding in that case of $166,500,000 yields an adjusted fair value rate base of $177,821,000. This figure is approximately $32,375,000 less than Petitioner's fair value estimate for the same properties (e.g., Petitioner's total fair value estimate of $307,665,180 minus the $97,469,069 attributed to Indiana Cities).

Petitioner's technique for estimating fair value results in overstated values. There is enough evidence in the record that can be used in conjunction with findings made in prior orders to allow us to derive alternative estimates for fair value, however.

Normally, we use the methods employed here to establish benchmarks against which to measure the reasonableness of the fair value estimates of the parties. Unfortunately, the OUCC presented no fair value evidence, and we believe Petitioner's estimates are significantly overstated. Given these circumstances, we are forced to adopt our own figures for fair value. We adopt our revised fair value estimates for Indiana Cities and Indiana American of $83,750,000 and $177,821,000, respectively, for a combined Company total of $261,571,000. The weight of the evidence in these proceedings supports this result, and we so find.

9. **Fair Rate of Return.** Having determined the fair value of Petitioner's property, the Commission must determine what level of net operating income represents a reasonable rate of return. This determination requires a balancing of the interests of the investors and the consumers. In Bethlehem Steel Corp. v. Northern Ind. Public Serv. Co. (1979), Ind. App., 397 N.E.2d 623, 630, the Court instructs "[w]hat annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts." One consideration in evaluating the reasonableness of a utility's return is the utility's overall weighted cost of capital.

Petitioner and the OUCC both submitted evidence on Petitioner's cost of capital. To determine Petitioner's overall cost of capital, both used Petitioner's capital structure as of December 31, 1994, adjusted to reflect Petitioner's post-test year financing involving the sale of $40,000,000 in bonds and $10,000,000 in common stock which was approved by the Commission in Cause No. 40230. At the time Petitioner filed its case-in-chief, the terms of the proposed bond issue were not finalized. The OUCC in its evidence incorporated the actual terms (Public's Ex. 1, D. Dukes, Sch. 1, p. 4) and Petitioner agreed in its rebuttal evidence with the capital structure amounts and cost rates, except for cost of common equity and JDITC (Petitioner's Ex. JLC-R3). We will accept the agreed-upon capital structure amounts and cost rates for purposes of determining Petitioner's cost of capital.

A. Cost of Common Equity.

(1) Petitioner's Case-In-Chief Evidence. Petitioner presented the testimony of Dr. Boquist on Petitioner's cost of common equity. In his direct testimony Dr. Boquist expressed the opinion that a 13% cost of common equity would be reasonable for Petitioner. Dr. Boquist used a number of different techniques in reaching this opinion.

Dr. Boquist first employed the discounted cash flow ("DCF") model. The traditional DCF model states that the price of an asset today equals the present value of all the future cash flows that the asset will generate. The discount rate equals the company's

cost of common equity. The traditional analysis as used by cost of capital witnesses assumes that if the market price of the stock is known, the cost of equity can be determined by adding the expected forward-looking dividend yield (dividends per share divided by market price per share) and the expected long-term dividend growth rate.

Since Petitioner's common stock is not publicly-traded, Dr. Boquist used the six publicly-traded water companies followed by Value Line Investment Survey as a proxy group. Dr. Boquist converted the current average dividend yield on market price for the sample companies to a forward-looking basis by applying his estimate of one year of dividend growth. Dr. Boquist then added the average growth rate in dividends experienced by the sample companies over the last ten years. This DCF approach arrived at an unadjusted result of 13.02%.

Dr. Boquist also used the capital asset pricing model ("CAPM") which holds that the cost of equity is equivalent to the return on a riskless security plus a risk premium, adjusted to reflect the beta coefficient of the company. The beta coefficient measures the responsiveness of a common stock's rate of return to that of the overall market. Dr. Boquist's unadjusted CAPM result was 12.69% which was derived by using the Merrill Lynch 10+ year treasury bond index rate from the February 10, 1995 Wall Street Journal as the riskless rate; the difference between the long-run arithmetic average rate of return on the Standard & Poor's 500 ("S&P 500") and intermediate-term bond returns taken from the Ibbotson Associates publication, Stocks Bonds Bills and Inflation, as the market premium; and a beta coefficient of 0.63, the average of the sample companies according to Value Line.

Dr. Boquist also employed a regulatory risk premium analysis by determining the spread between recent Commission-determined cost of common equity rates and the average yield on 10-year treasury bonds prior to the order dates. Dr. Boquist then applied this spread to the current 10+ treasury bond index rate to arrive at a result of 13.3%.

Dr. Boquist added a quality adjustment of 0.20% and a size adjustment of 0.20% to his DCF and CAPM results to reflect the greater riskiness of Petitioner compared to the sample companies and the companies in the S&P 500 used to represent the market in the CAPM. The latter adjustments stemmed from Petitioner's relatively small size, the relatively limited marketability of its securities, and its limited service area. Dr. Boquist concluded in his direct testimony that the 13% rate used by Petitioner in its cost of capital calculation would be a conservative estimate of Petitioner's cost of common equity, based on the following results of his studies:

Method	Common Equity Cost Rate
DCF	13.42%
CAPM	13.09%
Regulatory Risk Premium	13.30%
Arithmetic Average	13.27%
Recommendation	13.00%

However, Dr. Boquist cautioned that the DCF and CAPM approaches determine the required rate of return on the market value of stock and that application of a market-derived rate of return to a book value (original cost) rate base would understate the required return because the market values of the pertinent stocks exceed their book values. Dr. Boquist also stated that when the fair value of a utility's property exceeds its original cost, application of a market-derived cost of capital to an original cost rate base will fail to provide the company with the benefit of the appreciation in the value of its property.

(2) OUCC's Evidence. OUCC witness William R. Sudhoff, Utility Analyst, also used a DCF model in his analysis, but utilized two different samples of publicly-traded companies -- the same Value Line group used by Dr. Boquist and a group of nine companies covered by C.A. Turner Utility Reports. Mr. Sudhoff used recent six month average dividend yields for the sample companies and converted those yields to a forward-looking basis by reflecting one-half of one year of dividend growth. The forward yields were added to averages of historical and projected growth rates in dividends per share ("DPS"), earnings per share ("EPS") and book value per share ("BVPS"), in the case of the Value Line group, and five and ten year historical growth rates, in the case of the Turner group. Mr. Sudhoff's DCF analyses resulted in common equity cost rates of 9.91% and 10.81%.

Mr. Sudhoff also applied a CAPM approach using published betas from both his sample groups. In the CAPM, Mr. Sudhoff used current average yields on long term and 5-year treasury bonds for the riskless rate. Mr. Sudhoff determined the market premium by comparing the return on the S&P 500 from 1926 to 1994 taken from the Ibbotson Associates publication, using both arithmetic and geometric averages, with long term and 5-year treasury bond returns during the same period. The betas used by Mr. Sudhoff were taken from Value Line in the case of the Value Line group and from Merrill Lynch in the case of the Turner group. Mr. Sudhoff's CAPM results were 10.74% and 11.24% for the Value Line group, and 10.44% and 10.93% for the Turner group.

Mr. Sudhoff averaged his DCF and CAPM results and added 25 basis points to reflect the greater risk of Petitioner compared to the proxy groups. His ultimate recommendation was a cost of common equity rate of 10.90%. Mr. Sudhoff arrived at his recommendation from the following results of his analyses:

Method	Common Equity Cost Rate
DCF	
Value Line Group	9.91%
Turner Group	10.81%
CAPM	
Value Line Group	10.74%
	11.24%
Turner Group	10.44%
	10.93%
Arithmetic Average	10.66%
Risk Adjustment	.25%
Recommendation	10.90%

(3) **Petitioner's Rebuttal.** In his rebuttal testimony, Dr. Boquist revised his common equity cost rate estimate from 13.0% to 12.75%, based upon updated information. His updated unadjusted DCF result was 13.03% which was essentially the same as in his direct testimony. Although he reduced his growth rate by 30 basis points to reflect a correction which needed to be made as pointed out by Mr. Sudhoff, this change was offset by an increase in the dividend yield for the sample companies.

Dr. Boquist's unadjusted updated CAPM result, however, declined to 11.67% as a result of lower interest rates and changing the way the market premium was determined. In his updated CAPM, Dr. Boquist subtracted the average long-term bond return over the 1926-1994 period (rather than the intermediate term bond return) from the average S&P 500 common stock total return. This change was made to be more consistent with the use of the current 10+ year treasury bond index rate as the riskless rate.

After making the quality and size adjustments, Dr. Boquist's updated DCF and CAPM results were 13.43% and 12.07%, respectively. Based on the updated results of the following analyses, Dr. Boquist changed his recommended cost of common equity rate to 12.75%:

	Estimate
DCF Model	13.03%
Quality Adjustment	.20
Size Adjustment	.20
Adjusted Estimate	13.43%
CAPM Model	11.67%
Quality Adjustment	.20
Size Adjustment	.20
Adjusted Estimate	12.07%
Arithmetic Average of DCF and CAPM Adjusted Estimates	12.75%
Recommendation	12.75%

(4) **Commission Findings**. There was disagreement between Petitioner and the Public over the mechanics of the DCF model. First, regarding the calculation of the forward dividend yield in the DCF model, Dr. Boquist chose to use the full-year method, while Mr. Sudhoff utilized the half-year method. Second, regarding the estimation of the perpetual growth rate (g), Dr. Boquist chose an average of the 10-year dividend growth rates of his single proxy group from Value Line as his estimation of (g). Mr. Sudhoff relied upon the 10-year, 5-year, and forecasted growth rates of dividends, earnings, and book value per share, also from Value Line, for his Value Line proxy groups, and utilized an average of the 5-year and 10-year compounded historical growth rates of dividends, earnings, and book value per share as his estimate for the perpetual dividend growth rate of his C. A. Turner proxy group.

The Commission has considerable experience with the DCF model for estimating cost of capital. We are well aware of the advantages and limitations of the various approaches used by each of the witnesses. For example, the half-year method used by the OUCC for calculating the forward dividend yield is the most frequently used approach in this jurisdiction, and is rarely a point of contention in DCF analyses. We believe it fairly represents the dividend payments expected and received by investors, while the full-year method employed by Petitioner overstates the dividend yield. A recalculation of Petitioner's DCF using the half-year method by the OUCC resulted in a 20 basis point reduction (Sudhoff direct, p. 29). On the issue of deriving growth rates, this Commission has sanctioned the use of per share data for earnings, dividends and book value. Northern Indiana Fuel and Light, Cause Number 39145, January 29, 1992, p. 25. In all cases,

however, the Commission expects the parties to exercise sound judgement when deciding which inputs to include as part of their analyses. In this case, the inclusion of negative growth rates for certain earnings and book value per share data by the OUCC biased the derivation of its growth rates downward. On the other hand, the Petitioner's sole reliance on Value Line's 10-year dividend growth rate data had the opposite effect. Recalculating Petitioner's DCF using an average of Value Line's forecasted, five-year, and ten-year dividend growth rates contained in Petitioner's direct testimony (Exhibit JAB-1) results in a value of 11.04% (Sudhoff direct, p. 27).

Regarding CAPM, the major points of contention between Petitioner and Public were first, the Public's use of both the arithmetic mean and the geometric mean in calculating the risk premium, and second, Petitioner's use of the Merrill Lynch 10+ year Bond Index. The debate over the proper use of the arithmetic and geometric means is one we consider resolved. As we stated in Indianapolis Water Company, Cause No. 39713-39843, each method has its strengths and weaknesses, and neither is so clearly appropriate as to exclude consideration of the other. The Commission is well aware that using the geometric mean in CAPM analysis always yields a higher result than using the arithmetic mean. This is one of the reasons why Petitioner's CAPM results were consistently higher than those of the OUCC, who employed both means in its analyses.

We will now turn to the issue of the Merrill Lynch 10+ year Bond Index. In direct, Petitioner argued that an intermediate-term rate was appropriate as a proxy for the risk-free rate in this proceeding. On rebuttal, however, Dr. Boquist accepted Mr. Sudhoff's conclusion that the Merrill Lynch 10+ year Bond Index is a long-term rate. (Rebuttal testimony pp. 13-14) Petitioner continued to use the Index yield in its CAPM calculation, but matched the Index to a long-term market risk premium. The Commission recognizes that it is preferable to match proxies for the risk free rate with risk premia for like terms. We believe the change made by Petitioner resulted in a more internally consistent analysis, which enhanced its usefulness.

With regard to the Regulatory Risk Premium analysis, the Commission observes a number of problems with Petitioner's methodology for estimating the cost of capital. First, the analysis omitted data for over a one-year period of time, and included stipulated returns which the Petitioner explicitly represented as having been excluded. Second, declining interest rates materially affect the analysis results. The OUCC updated Petitioner's analysis using the Merrill Lynch 10+ year Bond Index employed by Dr. Boquist, and a 10 year Treasury Bond yield it deemed more appropriate, which resulted in revised estimates of 12.24% and 11.65%, respectively. Finally, we question the usefulness of such an analysis for comparative purposes. The study includes electric, gas and water utilities of varying sizes and

risk profiles, and the time frame analyzed is arbitrary. Even though the analysis was intended to serve only as a check on the reasonableness of the other cost of equity estimates (Boquist direct, p. 20), given the problems with the data included in the analysis, and its questionable suitability for comparative purposes, we find that it should not be considered for even the limited purpose proposed by Petitioner.

Petitioner has suggested the only appropriate method for applying the results of the DCF and CAPM methods to an original cost ratebase, as recommended by Public, would involve a market-to-book adjustment. We observed in our Final Order in Gary-Hobart Water Co., Cause No. 39585, that a market-to-book adjustment increases earnings, which increases the stock price, which increases the market-to-book ratio. Because this type of direct adjustment to the cost of equity has the potential to result in ever increasing authorized returns over time, we again reject it. Conversely, where the market-to-book ratio is less than 1.0, the Commission would be forced to authorize a return below the cost of capital, damaging the utility, ratepayers and shareholders. The rejection of a direct market-to-book adjustment should not be construed as a failure on the part of the Commission to recognize the problem, however. We have discussed this phenomenon in prior Orders, specifically, Indiana Mich. Power Co. (IURC 11/12/93), Cause No. 39314, pp. 62-63, and Indiana American Water Co. (IURC 2/2/94), Cause No. 39595, pp. 34-35, 150 PUR4th 141, 167-168. The Commission will continue to deal with the effects of market-to-book ratios in excess of 1.0 by basing its determination of an appropriate level of earnings for a utility on the totality of the return evidence presented in the case. Moreover, recognition of the current value of Petitioner's property in the fair value rate base, as we have done here, rather than its historical cost, alleviates much of the problem.

After deriving estimates of cost of equity for their proxy groups, both parties made adjustments to account for risks specific to Petitioner. Mr. Sudhoff added 25 basis points to his range of cost of equity estimates to account for the specific investment risk of the Petitioner. The OUCC's investment risk adjustment, however, was predicated on its position that the Petitioner's acquisition adjustment be denied in its entirety. Dr. Boquist's "quality" adjustment added 20 basis points to account for Petitioner's smaller size and limited marketability for its securities. Furthermore, Dr. Boquist reflected a "size" adjustment which added an additional 20 basis points for the smaller size of Petitioner relative to those water utilities included in his proxy group. Because these adjustments each take the Petitioner's size into consideration, they overlap which suggests that Petitioner has overstated the adjustments for business and investment risk. Moreover, the Commission has found that granting the Petitioner a return on the entire fair value of its utility properties, including the Indiana Cities properties, lessens its risk profile.

Neither party attempted to quantify this reduction in risk. We believe that any heightened risk exposure of Petitioner due to its small size and lack of marketability for its securities is offset by the reduction in regulatory risk due to the fair value treatment of the acquired Indiana Cities properties by this Commission. It is therefore not necessary to make any direct adjustments to our cost of equity estimates for business, investment, or regulatory risk purposes.

The DCF analyses presented in this case by both parties established a range of values from 9.91% to 13.03%. Despite the apparent difference of over 300 basis points, the OUCC's estimate for its C.A. Turner proxy group was 10.81%, and Petitioner's recalculated DCF using all of the Value Line data for dividend growth contained in its direct testimony was 11.04%. The CAPM analyses results ranged from 10.44% to 11.67%. The arithmetic average of the five CAPM estimates is 11.00%. Both the DCF and CAPM analyses converge on a reasonable estimate for the cost of equity capital of 11.00%. This value, to the extent practicable, reflects the elimination of the outliers that were upwardly and downwardly biased because of the specific assumptions made and the estimating techniques employed by the parties which we discussed above. We have expressed our reservations concerning the regulatory risk premium analysis presented by Petitioner, and rejected its use. We also found that no direct adjustment to the cost of equity was required to reflect company specific risk. Having considered all the evidence of record, we find that Petitioner's cost of equity capital is 11.00%.

B. **Overall Weighted Cost of Capital.** Use of an 11.00% cost of common equity produces an overall weighted cost of capital for Petitioner of 8.53% determined as follows:

	Amount	Percent	Cost	Weighted Cost
Long Term Debt	$111,853,235	51.79%	7.85%	4.07%
Preferred Equity	1,170,904	0.54%	5.61%	0.03%
Common Equity	83,934,107	38.87%	11.00%	4.28%
Deferred Taxes	15,291,007	7.08%	0.00%	0.00%
Cust. Deposits	109,172	0.05%	6.00%	0.00%
Pre-1971 ITC	149,321	0.07%	0.00%	0.00%
Post-1970 ITC	3,453,649	1.60%	9.18%	0.15%
Total	$215,961,395	100.00%		8.53%

The cost rate we have assigned to the post-1970 investment tax credits is the overall weighted cost of investor-supplied capital determined as follows:

	Amount	Percent	Cost	Weighted Cost
Long Term Debt	$111,853,235	56.79%	7.85%	4.46%
Preferred Equity	1,170,904	0.59%	5.61%	.03%
Common Equity	83,934,107	42.62%	11.00%	4.69%
Total	$196,958,246	100.00%		9.18%

This is consistent with the methodology adopted by the Commission in Indianapolis Power & Lt. Co. (PSCI 8/6/86), Cause No. 37837 at p. 18.

C. **Fair Rate of Return On Fair Value.** As we have said many times, cost of capital is not synonymous with a fair rate of return on the fair value of Petitioner's property. It is our duty to determine what rate of return on fair value is fair and reasonable.

Dr. Boquist testified that the return of a utility should correspond to the return investors could earn on investments of comparable risk in the unregulated sector. According to Dr. Boquist, if investors can earn a larger return and bear identical risks, or conversely earn identical returns with less risk, by investing in other (non-utility) industries, they will do so. Failure to recognize this fact would make it difficult for utilities to raise capital on a competitive basis. Dr. Boquist expressed the opinion that Petitioner should be allowed to earn a fair rate of return on the fair value of its property comparable to the rate of return which unregulated companies of comparable risk earn on the fair value of their assets. Therefore, Dr. Boquist selected a group of unregulated companies of comparable risk for purposes of his analysis.

Dr. Boquist identified comparable-risk unregulated companies by using the approach advocated by Fama and French in a 1992 study published in the Journal of Finance and in subsequent papers. Fama and French stated that the size of a firm measured by the market value of its equity ("ME") and the ratio of a firm's book value of equity to a firm's market value of equity (book-to-market equity ratio or "BE/ME") are the two risk factors influencing common stock returns because they have strong ties to economic fundamentals such as profitability and the growth of earnings and assets that have long been associated with investment performance.

Dr. Boquist replicated the Fama and French study so that all nonregulated firms in the New York Stock Exchange, American Stock Exchange and NASDAQ return files from the Center for Research in Security Prices and the merged COMPUSTAT computer data base for the years 1973 through 1991 (the latest available to Dr. Boquist at the time his direct testimony was prepared) were analyzed by computer and placed into portfolios using the two risk factors. Dr. Boquist

also estimated Petitioner's ME and BE/ME, using the multiple of the purchase price for Indiana Cities over book value as a reference. Firms for which data was inadequate or unavailable were eliminated. This left a portfolio of seven comparable companies with the same risk characteristics as Petitioner.

Dr. Boquist then determined the rate of return earned by the comparable companies on the depreciated replacement cost of their assets. To determine replacement cost Dr. Boquist used the techniques described in the work of Lindenberg and Ross, published in the Journal of Business in 1981 which prescribes a methodology for estimating replacement cost of a firm's assets from its accounting statements. This method considers price level changes, technological change, real economic depreciation and investment in new plant and equipment. The same 2% technological change adjustment used by Dr. Boquist in his determination of Petitioner's depreciated replacement cost was used for the comparable companies. From this study Dr. Boquist determined that the average annual rate of return on replacement value for the comparable companies from 1976 through 1993 was approximately 7.03%. He concluded that a rate of return of 7.03% on the fair value of Petitioner's property, measured on a depreciated replacement cost basis, would, therefore, be fair and reasonable.

OUCC witness Sudhoff cited a number of problems with Petitioner's comparable risk approach for estimating the fair rate of return on its fair value rate base. Specifically, the OUCC claims that the study is flawed for the following four reasons: 1) historical realized returns are not cost of equity estimates, 2) the entire analysis is dependent on the appropriateness of the purchase price for the Indiana Cities properties, 3) the Fama & French methodology has been challenged by academic sources, and 4) a reproduction of Dr. Boquist's study produces an almost completely different set of "comparable" firms. We will address each of these concerns.

The Commission agrees that historical realized returns are not cost of equity estimates. We are aware that it is only by chance that historical returns will provide an estimate equal to the actual cost of capital. Although this Commission has not always embraced the use of the comparable earnings methodology in past rate cases, this is largely because we perceived significant deficiencies in the application of the methodology in specific instances, and the use to which it was being put. We have already observed that all methodologies for estimating the cost of capital have their unique advantages and limitations. The comparable earnings approach distinguishes itself in that it is one of the most difficult estimating techniques to employ. The reliability of comparable earnings analysis is largely dependent on the skill and judgement of the analyst, and the ability to compensate for accounting data problems and the effects of inflation. It is Petitioner's position that historical returns can be used to

determine the rate of return earned by comparable risk companies on the replacement cost of their property for the purpose of analyzing what would be a fair rate of return on the fair value of Indiana-American's property (Boquist rebuttal, p. 25). It appears to the Commission that Petitioner is advocating the use of historic returns, albeit on replacement cost, to establish a benchmark against which a fair rate of return can be evaluated. Although we agree that Petitioner's comparable earnings approach is not the best methodology for estimating fair return because of the questionable predictive value of the results, it can be used for the purposes of assisting the Commission in establishing a range of values to consider, and testing the reasonableness of our fair return finding.

Similarly, we agree with the OUCC that the entire analysis is predicated on Indiana Cities' purchase price being a legitimate proxy for the market valuation of the entire Indiana American system. The OUCC has demonstrated that the valuation of the Indiana Cities properties was to some extent arbitrary. The Indiana Cities purchase price was an assigned rather than independently established value. The allocation did not occur until after the $62 million purchase price had been established for the entire Midwestern Utilities system. Likewise, we agree with the OUCC that Petitioner's analysis is sensitive to variations in the price assigned to the Indiana Cities properties (Sudhoff direct, p. 21). Most estimating techniques require the establishment of proxies, however, and all estimating techniques demonstrate varying degrees of sensitivity to changes in inputs. Although the model is sensitive to changes in data inputs, our focus is whether the changes examined by the OUCC are reasonable and material. Despite the fact the purchase price for Indiana Cities was assigned, we have no evidence indicating that the assigned price was overstated. Dr. Boquist's market-to-book ratio reflects the actual assigned price and is therefore not flawed in that regard. Absent any evidence on the excessiveness of the price assigned to Indiana Cities, arbitrarily varying the price to test the model's sensitivity serves no useful purpose. These criticisms have little merit under the circumstances and do not preclude consideration of the Petitioner's results.

We view the criticisms of the Fama and French methodology by various academic sources as further evidence of the model's shortcomings and limitations that enhance our understanding, rather than fatal flaws that prohibit its use. Again, all methods for estimating the cost of capital are potentially helpful provided that the users of such information are cognizant of biases and make the necessary adjustments. The gist of the Public's argument seems to be that there are methodologies using beta, which it deems to be a better proxy for risk, that are superior to the comparable earnings approach selected and used by Petitioner. That may very well be true. We will remind the Public that it was free to perform any alternative analysis it chose, and to persuade us with

a different, and perhaps superior, technique and estimate for the fair rate of return. The OUCC did not do so.

Finally, the OUCC has demonstrated that the comparable earnings model is sensitive to changes in inputs. Replacing the 1991 return data with data for 1993 resulted in a completely different group of comparable companies save one, and a different return on replacement value of 7.71% (Sudhoff direct, Schedule 10, p. 1 of 1). We would expect updated COMPUSTAT information to result in changes to the comparable group and the result. We agree with Dr. Boquist that the criteria for assessing the importance of this changed result should be whether the return on replacement cost was materially altered by updating the study, rather than on whether the group of comparable firms remained the same. The updated result of 7.71% is an increase over the original estimate, but not a particularly significant one given the ranges this Commission normally sees presented for its consideration on the issue of rate of return. We conclude that the sensitivity of the comparable earnings model to changes in inputs was acceptable under the circumstances. The updated estimate provides the Commission with yet another piece of information to consider in our evaluation of fair rate of return. We will examine the reasonableness of the original and updated estimates below.

The OUCC has raised legitimate concerns relating to the Fama and French model itself, and to Petitioner's application of the model as well. We agree that changing the inputs and assumptions may have resulted in a different estimate for fair return, and that use of a different estimating technique might have yielded a superior estimate. Neither of these contentions persuade us to reject Petitioner's evidence, however. Petitioner was free to choose the model it deemed best for estimating a fair return benchmark, and apply that model as it saw fit. Although we recognize that Petitioner's estimate is far from perfect, it is not so problem-plagued as to render it unacceptable and useless. The Commission believes that the Petitioner reasonably applied a very difficult model to derive its estimates. Furthermore, Petitioner presented the only evidence of record on the issue of fair return. Were we to reject this evidence, we would be left with only our own estimates for fair return to establish a reasonable range; we would have nothing against which to measure the reasonableness of our finding.

It is not enough for the OUCC to present the Commission with an original cost test for establishing the reasonableness of a fair return. We acknowledge that under certain circumstances, an original cost return applied to an original cost rate base will closely approximate or equal a fair return applied to a fair value rate base. This is not one of those cases, however, because Petitioner's market-to-book ratio is not 1.0. We have already observed that this problem can be adequately addressed by establishing rates based on fair value. Moreover, we are

statutorily mandated to do so. The original cost method for establishing return is separate and distinct from the fair value method, despite the fact the results may be very similar under certain conditions. In this case, we are limited to Petitioner's evidence on the issues of fair value rate base and fair return because the OUCC provided no alternatives for our consideration. Not only did the OUCC fail to provide alternative estimates for the fair return, it also neglected to include any evidence on inflation from which an alternative fair return estimate could have been derived.

Other evidence exists in the record of these proceedings that can be used to establish estimates for the Petitioner's fair return, however. The Courts have recognized that utilities are to earn a return upon the fair value of their rate base, which reflects the effects of historic inflation. In order to avoid over-compensating Petitioner for the effects of historic inflation it is necessary to remove the historic inflation component from the costs of capital to derive a fair return. We are aware that all components of Petitioner's capital structure reflect historic inflation to some extent, some more than others. For example, the cost of equity not only reflects historic inflation, but anticipated or prospective inflation as well. Unfortunately, the evidence on inflation presented in this case was meager, and no evidence was presented on the effects of inflation on the individual components of the Petitioner's capital structure. This forces the Commission to take a more conservative approach for estimating the fair rate of return than it otherwise may have taken under different evidentiary circumstances. We will therefore eliminate the effects of historic inflation from only the debt component of the Petitioner's capital structure because the embedded cost of debt reflects historic inflation exclusively.

Our perusal of the record indicates that Petitioner established a value for historic growth of 3.75% for the period 1983 through 1992 to forecast the growth in its O & M savings. To establish the reasonableness of this estimate, the Petitioner compared it to information for the same period from the *Ibbotson Associates 1995 Yearbook* (Eckart rebuttal, p. 21). The comparable figure was 3.8%, which we believe supports Petitioner's contention that its estimate for historic growth was reasonable. Removing the historic growth and inflation rates of 3.75% and 3.8% from the Petitioner's original cost of debt yields estimates for the fair return of 6.74% and 6.72%, respectively. Based on the same *Ibbotson* data, the historic inflation rate was 4.2% for the 1952 through 1993 period (*id.*, p. 22). Removing this historic inflation value from the debt component results in a fair value estimate of 6.50%.

The range for fair returns established by the evidence of record is approximately 6.50% to 7.70%. A useful tool for examining the reasonableness of a fair value return is a comparison

to the results generated by applying the weighted cost of capital to the original cost rate base, which in this case generates a net operating income (NOI) of $15,889,633. Although we have already discussed the inappropriateness of the OUCC's original cost test for establishing the reasonableness of our fair value finding in this case, the test can be performed to exclude results that are clearly outside the range of reasonableness under any methodology. If Petitioner were awarded a fair value return of 7.03% or 7.70%, which represent the high end of the range of values, its NOI would be $18,388,441 and $20,140,967, respectively. To generate these same NOIs on an original cost basis would require authorization of returns on equity of 14.41% and 16.78%. These returns vastly exceed our original cost finding for the cost of equity of 11.00%, and exceed Petitioner's own original recommendation of 13.00%, which was later reduced to 12.75%. Having eliminated the high end of our range from consideration, the remaining values establish a range of 6.50% to 6.74%, and we find this to be reasonable.

To determine a reasonable and acceptable return on fair value in the instant case, the Commission must also strive to simultaneously achieve certain other desirable objectives to the extent practicable. First, we must endeavor to alleviate the problems that result from Petitioner's market-to-book ratio being in excess of one. We recognize and have already observed that market-to-book ratios in excess of 1.0 tend to understate the net operating income necessary to produce a given level of return to sufficiently compensate shareholders. Second, and similarly, the Commission also is aware that the DCF methodology for computing the cost of capital assumes a 100% payout ratio, which the Commission does not advocate. Payout ratios of 100% preclude the retention of funds in a business that are necessary to assure the ongoing provision of safe, adequate, and reliable service. Finally, the Commission has found that Petitioner can and should be compensated for its investment in the Indiana Cities properties through informed fair value ratemaking by fully recognizing their fair value in its fair value rate base determination. The Commission must now ascertain a fair rate of return to apply to its fair value rate base that will result in a net operating income that adequately and fairly compensates Petitioner for its investments, while maintaining Petitioner's financial viability so that it can continue to attract capital in the marketplace. Based on all the evidence of record, we find that a fair value return of 6.50% produces the desired results. Applying the fair return of 6.50% to the fair value ratebase of $261,571,000 previously found generates an NOI of $17,002,115, which adequately balances the interests of ratepayers, the utility and its shareholders, and achieves the objectives set forth above.

10. <u>Rate Increase Allowed</u>. On the basis of the evidence presented in these proceedings, we find that Petitioner should be authorized to increase its rates and charges to produce additional operating revenue of $2,635,839. When added to Petitioner's

adjusted operating revenues at present rates, $56,794,472, the resulting total annual revenue Petitioner should be authorized to earn is $59,430,311. This revenue is reasonably estimated to allow Petitioner the opportunity to earn net operating income of $17,002,115. The estimated financial results from this revenue increase on each of Petitioner's operations as well as on a total-company basis are as follows:

PROFORMA INCOME STATEMENTS AT PROPOSED RATES	Crawfordsville	Franklin	Greenwood	Jeffersonville	Kokomo	Muncie
Operating revenues	$1,484,074	$1,524,921	$3,977,349	$4,096,886	$10,418,651	$9,083,995
O & M expenses	$817,867	$608,585	$1,580,467	$2,242,600	$3,269,785	$3,654,690
Depreciation	106,347	133,835	372,145	271,684	1,495,365	1,176,257
Amortization	1,590	3,247	8,637	4,480	41,751	8,084
Other taxes	116,076	120,976	280,734	379,490	668,019	966,615
State income tax	17,327	24,423	63,264	49,086	165,948	130,555
Federal income tax	90,505	138,128	361,419	243,438	979,351	625,905
Total Operating Expenses	$1,149,713	$1,029,194	$2,666,667	$3,190,778	$6,620,218	$6,562,106
Net Operating Income	$334,362	$495,726	$1,310,682	$906,107	$3,798,433	$2,521,889

PROFORMA INCOME STATEMENTS AT PROPOSED RATES	New Albany	Newburgh	Noblesville	Richmond	Seymour	Shelbyville
Operating revenues	$3,909,838	$1,203,333	$1,503,865	$5,852,776	$2,594,006	$2,160,506
O & M expenses	$2,175,416	$648,100	$628,778	$2,673,538	$1,071,921	$901,957
Depreciation	257,934	87,019	147,656	720,627	389,650	207,720
Amortization	4,038	1,362	1,212	4,644	5,259	1,682
Other taxes	313,558	87,406	146,872	576,642	141,134	159,186
State income tax	44,753	14,265	23,444	75,180	33,333	33,155
Federal income tax	232,687	77,161	124,410	360,840	202,024	191,841
Total Operating Expenses	$3,028,387	$915,313	$1,072,371	$4,411,470	$1,843,320	$1,495,541
Net Operating Income	$881,451	$288,020	$431,494	$1,441,306	$750,686	$664,965

PROFORMA INCOME STATEMENTS AT PROPOSED RATES	Somerset Water	Somerset Sewer	Summitville	Wabash	Wabash Valley	Total Company
Operating revenues	$34,656	$27,890	$139,019	$1,312,825	$10,105,722	$59,430,311
O & M expenses	$23,164	$18,045	$97,036	$740,493	$4,045,315	$25,197,758
Depreciation	3,127	3,080	5,652	87,393	1,487,747	6,953,238
Amortization	29	29	121	1,357	25,678	113,200
Other taxes	2,839	2,283	12,223	95,865	817,462	4,887,379
State income tax	229	215	990	14,345	138,231	828,743
Federal income tax	830	817	4,443	75,544	738,536	4,447,878
Total Operating Expenses	$30,218	$24,468	$120,465	$1,014,997	$7,252,969	$42,428,196
Net Operating Income	$4,438	$3,422	$18,554	$297,828	$2,852,753	$17,002,115

The determinations in the preceding table reflect the effect of additional revenue on income taxes, the gross receipts tax, the IURC fee and uncollectible accounts consistent with the gross revenue conversion factors shown on Petitioner's Ex. JLC-1, Sch. 1C.

Based on the evidence and giving appropriate weight to the need for Petitioner to maintain and support its credit, to raise funds necessary to discharge its public duties and to earn a return commensurate with that earned by enterprises of corresponding risk, the Commission finds that rates estimated to produce these results are just and fair and should allow Petitioner the opportunity to earn a reasonable return on its property dedicated to providing water and sewer service to the public. This rate adjustment is intended to increase Petitioner's total operating revenues by approximately 4.64%. As a result of these findings, the effects on local operations are projected to be:

Operation	Revenue Increase	Percent Increase
Crawfordsville	$6,943	.47%
Franklin	192,989	14.49%
Greenwood	494,325	14.19%
Jeffersonville	506,673	14.11%
Kokomo	1,299,956	14.26%
Muncie	(150,435)	(1.63)%
New Albany	757,375	24.02%
Newburgh	114,066	10.47%
Noblesville	71,755	5.01%
Richmond	(317,665)	(5.15)%
Seymour	72,191	2.86%
Shelbyville	160	.01%
Somerset Sewer	(1,774)	(5.98)%
Somerset Water	4,194	13.77%
Summitville	18,758	15.60%
Wabash	98,324	8.10%
Wabash Valley	(531,995)	(5.00)%
Total Company	$2,635,839	4.64%

11. **Method of Implementing Rate Increase**. Petitioner's proposed rate schedules are set forth in Petitioner's Exhibit JLC-4. The proposed rates were determined by consolidating the rates applicable in Greenwood and Franklin and in Jeffersonville and New Albany into a uniform rate schedule and increasing the present rates for each operation on an across-the-board basis. Mr. Eckart testified that the adoption of a single tariff in Greenwood/Franklin and Jeffersonville/New Albany was justified by the fact that these systems were physically interconnected, share

water supply, and are operated as single systems. The OUCC expressed no objection to this rate consolidation proposal of Petitioner or to an across-the-board increase. The Commission finds that, subject to the modification as to the level of such rates as ordered herein, such rate structure and rate schedules are fair, just, reasonable and non-discriminatory.

Petitioner therefore should file its proposed rates and rate schedules as set forth in Petitioner's Exhibit JLC-4 with a reduction therein applied to the extent practicable evenly and uniformly to all proposed service charges, volumetric rates and public and private fire charges so as to provide the revenue adjustment authorized herein. With respect to Greenwood/Franklin and Jeffersonville/New Albany, the revised rate schedules shall implement the uniform rate proposal approved herein.

IT IS, THEREFORE, ORDERED BY THE INDIANA UTILITY REGULATORY COMMISSION that:

1. Petitioner is hereby authorized to adjust and increase its rates and charges for water and sewer utility service in accordance with the findings herein which rates and charges by 4.64% which is designed to produce total annual operating revenues of $59,430,311.

2. Petitioner shall file new schedules of rates and charges with the Engineering Division of the Commission on the basis set forth in Finding No. 11. Such new schedules of rates and charges shall be effective upon filing and approval by the Engineering Division and shall apply to water and sewer usage from and after the date of approval.

3. This Order shall be effective on and after the date of its approval.

MORTELL, HUFFMAN AND KLEIN CONCUR; ZIEGNER DISSENTS:
APPROVED: MAY 30 1996

I hereby certify that the above is a true and correct copy of the Order as approved.

Kostas Poulakidas, Secretary to the Commission
and Executive Director