

FILE

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application of Ohio	)	
American Water Company to Increase Its	)	Case No. 11-4161-WS-AIR
Rates for Water Service and Sewer Service.	)	

**DIRECT TESTIMONY
OF
PAUL R. HERBERT
ON BEHALF OF
OHIO AMERICAN WATER COMPANY**

- ☐ Management policies, practice and organization
- ☐ Operating income
- ☐ Rate base
- ☒ Allocations
- ☐ Rate of return
- ☒ Rates and tariffs
- ☐ Other

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Direct Testimony of

Paul R. Herbert

I. WITNESS INTRODUCTION

Q1. Please state your name and address.

A1. My name is Paul R. Herbert. My business address is 207 Senate Avenue, Camp Hill, Pennsylvania.

Q2. By whom are you employed?

A2. I am employed by Gannett Fleming, Inc. as President of the Valuation and Rate Division. My duties and responsibilities include the preparation of accounting and financial data for revenue requirement and cash working capital claims, the allocation of cost of service to customer classifications, and the design of customer rates in support of public utility rate filings.

Q3. Have you previously testified in rate case proceedings before regulatory agencies?

A3. Yes. I have testified before the Pennsylvania Public Utility Commission, the New Jersey Board of Public Utilities, the Public Utilities Commission of Ohio, the Public Service Commission of West Virginia, the Kentucky Public Service Commission, the Iowa State Utilities Board, the Virginia State Corporation Commission, the Missouri Public Service Commission, the New Mexico Public Regulation Commission, the Public Utilities Commission of the State of California, the Illinois Commerce Commission, the Delaware Public Service Commission, the Arizona Corporation Commission, the Connecticut Department of Public Utility Control, and the Tennessee Regulatory Authority, concerning revenue requirements, cost of

1 service allocation, rate design and cash working capital claims. A list of cases in
2 which I have testified is attached to my testimony.

3 **Q4. What is your educational background?**

4 A4. I have a Bachelor of Science Degree in Finance from the Pennsylvania State
5 University, University Park, Pennsylvania.

6 **Q5. Do you have any professional affiliations?**

7 A5. Yes. I am a member of the American Water Works Association and have served as a
8 member of the Management Committee for the Pennsylvania Section. I am also a
9 member of the Pennsylvania Municipal Authorities Association. In 1998, I became a
10 member of the National Association of Water Companies as well as a member of its
11 Rates and Revenue Committee.

12 **Q6. Briefly describe your work experience.**

13 A6. I joined the Valuation Division of Gannett Fleming Corrdry and Carpenter, Inc.,
14 predecessor to Gannett Fleming, Inc., in September 1977, as a Junior Rate Analyst.
15 Since then, I advanced through several positions and was assigned the position of
16 Manager of Rate Studies on July 1, 1990. On June 1, 1994, I was promoted to the
17 position of Vice President, on November 1, 2003, I was promoted to Senior Vice
18 President, and on July 1, 2007 I was promoted to my current position as President.

19 While attending Penn State, I was employed during the summers of 1972,
20 1973 and 1974 by the United Telephone System - Eastern Group in its accounting
21 department. Upon graduation from college in 1975, I was employed by Herbert
22 Associates, Inc., Consulting Engineers (now Herbert Rowland and Grubic, Inc.), as a
23 field office manager until September 1977.

1 **Q7. What is the purpose of your testimony in this proceeding?**

2 A7. The purpose of my testimony is to explain Ohio American Water Company's cost of
3 service allocation studies for the water and wastewater operations, set forth in
4 Schedule E-3.2 of the Company's filing. This schedule presents the results of the
5 cost of service study I performed for the Company's water and wastewater
6 operations.

7 **II. COST OF SERVICE ALLOCATION – WATER OPERATIONS**

8 **Q8. Briefly describe the purpose of your cost allocation study for the water**
9 **operations.**

10 A8. The purpose of the study was to allocate the total cost of service, which is the total
11 revenue requirement for the Water A and Water C areas, to the several customer
12 classifications. In the study, the total costs were allocated to the residential,
13 commercial, industrial, special contracts-industrial, public authorities, special
14 contracts-resale, and private fire protection classifications in accordance with
15 generally accepted principles and procedures. The cost of service allocation results
16 in indications of the relative cost responsibilities of each class of customers. The
17 allocated cost of service is one of several criteria appropriate for consideration in
18 designing customer rates to produce the required revenues. The results of my
19 allocation of the pro forma cost of service for the test year ended December 31, 2011
20 and proposed customer rates to produce the pro forma revenue requirement as of that
21 date are presented in the study.

1 **Q9. Please describe the method of cost allocation that was used in your study.**

2 A9. The base-extra capacity method, as described in 2000 and prior Water Rates Manuals
3 published by the American Water Works Association (AWWA), was used to allocate
4 the pro forma costs. Base-extra capacity is a recognized method for allocating the
5 cost of providing water service to customer classifications in proportion to the
6 classifications' use of the commodity, facilities, and services. It is generally accepted
7 as a sound method for allocating the cost of water service and was used by the
8 Company in the Company's previous studies.

9 **Q10. Please describe the procedure you used to perform the cost allocation study**
10 **presented in Schedule E-3.2 of the Company's filing.**

11 A10. Each identified classification of cost in the pro forma cost of service was allocated to
12 the customer classifications through the use of appropriate factors. These allocations
13 are presented in Schedule B on pages 3 through 8 of 48. The items of cost, which
14 include operation and maintenance expenses, depreciation expense, taxes and
15 income available for return, are identified in column 1 of Schedule B. The cost of
16 each item, shown in column 3, is allocated to the several customer classifications
17 based on allocation factors referenced in column 2. The development of the
18 allocation factors is presented in Schedule C. I will use some of the larger cost items
19 to illustrate the principles and considerations used in the cost allocation
20 methodology.

21 Purchased electric power, treatment chemicals and waste disposal are
22 examples of costs that tend to vary with the amount of water consumed and are thus
23 considered base costs. They are allocated to the several customer classifications in

1 direct proportion to the average daily consumption of those classifications through
2 the use of Factor 1. The development of Factor 1 is shown in Schedule C on page 8
3 of 48 and includes an estimate of consumption for unmetered customers. Factor 1A,
4 used to allocate purchased water, is similar to Factor 1, except that special contracts-
5 resale volumes are excluded.

6 Other source of supply, water treatment and transmission costs are associated
7 with meeting usage requirements in excess of the average, generally to meet
8 maximum day requirements. Costs of this nature were allocated to customer
9 classifications partially as base costs, proportional to average daily consumption,
10 partially as maximum day extra capacity costs, in proportion to maximum day extra
11 capacity, and, in the case of certain pumping stations and transmission mains,
12 partially as fire protection costs, through the use of Factors 2 and 3. The
13 development of the allocation factors, referenced as Factors 2 and 3, is shown in
14 Schedule C, on pages 9 through 12 of 48. Factors 3, 4 and 5 use the volumes from
15 Factor 1A which excludes volumes for special contracts-resale.

16 Costs associated with storage facilities and the capital costs of distribution
17 mains were allocated partly on the basis of average consumption and partly on the
18 basis of maximum hour extra demand, including the demand for fire protection
19 service, because these facilities are designed to meet maximum hour and fire demand
20 requirements. The development of the factors, referenced as Factors 4 and 5, used
21 for these allocations is shown in Schedule C, on pages 13 through 16 of 48.

22 Fire demand costs were allocated to public and private fire protection service
23 in proportion to the relative potential demands on the system by public fire hydrants

1 and private service lines as presented in Schedule D on page 31 of 48. The portion
2 of fire demand allocated to Public Fire Protection is reallocated to Residential,
3 Commercial, Industrial, Industrial-Special Contracts, and Public Authority
4 classifications based on meter equivalents.

5 Costs associated with pumping facilities and the operation and maintenance
6 of mains were allocated on combined bases of maximum day and maximum hour
7 extra capacity because these facilities serve both functions. For pumping facilities,
8 the relative weightings of Factor 2 (maximum day), Factor 3 (maximum day and fire)
9 and Factor 4 (maximum hour) were based on horsepower of pumps serving
10 maximum day, maximum day and fire and maximum hour functions. The
11 development of this weighted factor, referenced as Factor 6, is presented on page 17
12 of 48.

13 For operation and maintenance of mains, the relative weightings of Factor 3
14 (maximum day and fire) and Factor 4 (maximum hour) were based on the footage of
15 transmission and distribution mains. For cost allocation purposes, mains 10-inch and
16 larger were classified as serving a transmission function and mains less than 10-inch
17 were classified as serving a distribution function. The development of this weighted
18 factor, referenced as Factor 7, is presented on page 18 of 48. Costs associated with
19 public fire hydrants were assigned to Residential, Commercial, Industrial and Public
20 Authority classes based on meter equivalents, as shown in Factor 8.

21 Costs associated with meters were allocated to customer classifications in
22 proportion to the capacity requirements of the sizes and quantities of meters serving
23 each classification. The development of the factor for meters, referenced as Factor 9,

1 is presented on page 19 of 48. Factor 10, Allocation of Services, on page 21 of 48,
2 was developed in a similar manner as Factor 9.

3 Costs for customer accounting, billing and collecting were allocated on the
4 basis of the number of bills rendered for each classification. Costs for meter reading
5 were allocated based on an analysis of the number of man-days required to read
6 meters by classification shown in Factor 14. Costs related to uncollectible accounts
7 and customer related management fees are allocated based on the number of
8 customers. The development of these factors, referenced as Factors 13, 14 and 20
9 are presented on pages 24 and 30 of 48.

10 Administrative and general costs were allocated on the basis of allocated
11 direct costs, excluding those costs such as purchased water, power, chemicals and
12 waste disposal which require little administrative and general expense. The
13 development of factors for this allocation, referenced as Factor 15, is presented on
14 page 25 of 48.

15 Annual depreciation accruals were allocated on the basis of the function of
16 the facilities represented by the depreciation expense for each depreciable plant
17 account. The original cost less depreciation of utility plant in service was similarly
18 allocated for the purpose of developing factors, referenced as Factor 18, for allocat-
19 ing items such as income taxes and return. The development of Factor 18 is
20 presented on pages 27 through 29 of 48.

21 Factors 15 and 18, as well as Factors 11, 12, 16, 17 and 19, are composite
22 allocation factors. These factors are based on the result of allocating other costs and

are computed internally in the cost allocation program. Refer to Schedule C for a description of the bases for each composite allocation factor.

Q11. Please explain the allocation of small mains.

A11. Factor 4, used to allocate distribution mains, was modified to exclude consumption for special contract–industrial customers connected to transmission mains. This modification recognizes that these customers are connected directly to the transmission system and do not benefit from the smaller distribution mains.

Q12. How was this allocation accomplished?

A12. The special contract-industrial customers are connected to 12- and 16-inch mains. The test year consumption for these customers was excluded from the industrial class for the basis of developing Factor 4.

Q13. Please describe the allocation of mains and storage costs to the Special Contracts – Resale classification.

A13. The Special Contracts – Resale classification is excluded from the allocation of transmission and distribution mains and storage facilities, because Aqua Ohio contributed to the transmission main required to serve them and also has adequate distribution and storage facilities necessary to service its customers.

Q14. What was the source of the total cost of service data set forth in Column 3 of Schedule B?

A14. The pro forma costs of service were furnished by the Company, and are set forth in various Company schedules sponsored by Ohio American witnesses Mr. Gary VerDouw, Melissa Schwarzell, Donald Petry and Lewis Keathley.

1 **Q15. Referring to Schedule E-3.2, Schedule C, pages 9 and 13 of 48, please explain**
2 **the source of system maximum day and maximum hour ratios used in the**
3 **development of factors referenced as Factors 2, 3 and 4.**

4 A15. The ratios were based on a review of historic Company data. The maximum day
5 ratio of 1.40 times the average day approximates the ratio of maximum daily send-
6 out experienced by the Company in the last five years. The maximum hour ratio of
7 2.0 times the average hour was estimated based on the relationship of system
8 maximum hour ratios compared to system maximum day ratios for other similar
9 systems.

10 **Q16. What factors were considered in estimating the maximum day extra capacity**
11 **and maximum hour extra capacity demands used for the customer**
12 **classifications in the development of Factors 2, 3 and 4?**

13 A16. The estimated demands were based on judgment which considered field studies of
14 actual customer class demands conducted for other American Companies, field
15 observations of the service areas of the Company, field studies of similar service
16 areas, and generally-accepted customer class maximum day and maximum hour
17 demand ratios.

18 **Q17. Have you summarized the results of your cost allocation study?**

19 A17. Yes. The results are summarized in Schedule E-3.2, columns 1, 2 and 3 of Schedule
20 A on page 2 of 48. Column 2 sets forth the total allocated pro forma cost of service
21 for the test year December 31, 2011, for each customer classification identified in
22 column 1. Column 3 presents each customer classification's cost responsibility as a
23 percent of the total cost.

1 **Q18. Have you compared these cost responsibilities with the proportionate revenue**
2 **under existing rates for each customer classification?**

3 A18. Yes. A comparison of the allocated cost responsibilities and the percentage revenue
4 under existing rates can be made by comparing columns 3 and 5 of Schedule A. A
5 similar comparison of the percentage cost responsibilities (relative cost of service)
6 and the percentage of pro forma revenues (relative revenues) under proposed rates
7 can be made by comparing columns 3 and 7 of Schedule A. This comparison shows
8 that revenues under proposed rates generally move toward the indicated cost of
9 service. It should be emphasized that the Cost of Service Study is used as one of the
10 guidelines for rate design. A Cost of Service Study presents parameters for
11 designing rates. Designed rates rarely match exactly the rates that would be derived
12 strictly and exclusively from the results of the Cost of Service Study. For a detailed
13 discussion of proposed rates and rate design, please refer to the testimony of
14 Company witness Mr. Donald Petry.

15 **Q19. Did you prepare an analysis of the costs related to the water customer charges?**

16 A19. Yes, I did. Schedule E on pages 32 through 34 of 48 of the water cost of service
17 study, sets forth the calculation of customer charges based on the staff methodology.
18 The analysis also includes costs associated with fire hydrants and office structures
19 and improvements. Fire hydrant costs are fixed costs that are not recovered through
20 public fire hydrant rates, so these costs are appropriately recovered in customer
21 charges. Office structures are required to house office furniture and equipment that
22 is necessary to provide customer service.

1 **Q20. What are the results of your customer charge analysis?**

2 A20. The total customer cost per month for a 5/8-inch meter is \$11.57, shown on page 34
3 of 48 of Schedule E. A charge of \$11.50 per month is recommended at this time.

4 **III. COST OF SERVICE ALLOCATION – WASTEWATER OPERATIONS**

5 **Q21. Please describe the cost of service allocation for the wastewater operations.**

6 A21. The cost of service study for the wastewater operations is similar to the water cost
7 allocation study. It allocates each element of the cost of service to cost functions and
8 then to customer classifications. The cost functions are flow, extra capacity,
9 infiltration and inflow, customer facilities and customer accounting. The results of
10 allocating costs to the cost functions are then allocated to the Residential and
11 Commercial/Public Customer classifications, based on the water usage and the
12 number of customer of each class.

13 **Q22. Please describe the procedure followed in the cost allocation study.**

14 A22. The cost of service by account was allocated to cost functions in Schedule D. The
15 cost of each element shown in column 3 of Schedule D was allocated based on the
16 allocation factor referenced in column 2. The allocation factors are shown in
17 Schedule E.

18 Costs that vary with the average volume of flow, such as power and
19 chemicals, are allocated to the flow cost function and infiltration and inflow
20 function, to recognize that a portion of the flow is not customer induced.

21 Costs associated with meeting maximum day extra capacity demands, such as
22 treatment facilities, are allocated partly to flow, partly to maximum day extra
23 capacity and partly to infiltration and inflow.

1 Costs associated with meeting maximum hour extra capacity demands such
2 as collecting and transmission facilities are allocated partly to flow, partly to
3 maximum hour extra capacity and partly to infiltration and inflow.

4 Costs associated with customer facilities and customer accounting are
5 allocated directly to those functions.

6 Administrative and general costs and labor related taxes and benefits are
7 allocated using composite factors in a similar manner as described in the water cost
8 allocation. Income taxes and return are allocated based on the allocation of rate base
9 shown in Schedule E.

10 **Q23. Please describe the next step in the allocation.**

11 A23. The result of allocating the costs to cost functions in Schedule D are brought forward
12 to Schedule B. Schedule B shows the allocation of the functional costs to customer
13 classifications using the Factors A through E described in Schedule C.

14 The results of allocating the functional costs to customer classes are brought
15 forward to Schedule A, column 2. These results can be compared to the revenues
16 under present rates in columns 4 and 5 and under proposed rates in columns 6 and 7.
17 The proposed increase is shown in column 8 with percentage increase in column 9.
18 This comparison shows that revenues under proposed rates generally move toward
19 the indicated cost of service. The Cost of Service Study is used as one of the
20 guidelines for rate design. For a detailed discussion of proposed rates and rate
21 design, please refer to the testimony of Mr. Petry.

22 **Q24. Does this conclude your direct testimony?**

23 A24. Yes, it does.

**PAUL J. HERBERT
WITNESS PARTICIPATION**

No.	Year	Regulatory Body	Case No.	Utility Company	Testimony Subject
1.	1983	Pa. PUC	R-832399	T. W. Phillips Gas and Oil Co.	Pro Forma Revenues
2.	1989	Pa. PUC	R-891208	Pennsylvania-American Water Company	Bill Analysis and Rate Application
3.	1991	PSC of W. Va.	91-106-W-MA	Clarksburg Water Board	Revenue Requirements (Rule 42)
4.	1992	Pa. PUC	R-922276	North Penn Gas Company	Cash Working Capital
5.	1992	NJ BPU	WR92050532J	The Atlantic City Sewerage Company	Cost Allocation and Rate Design
6.	1994	Pa. PUC	R-943053	The York Water Company	Cost Allocation and Rate Design
7.	1994	Pa. PUC	R-943124	City of Bethlehem	Revenue Requirements, Cost Allocation, Rate Design and Cash Working Capital
8.	1994	Pa. PUC	R-943177	Roaring Creek Water Company	Cash Working Capital
9.	1994	Pa. PUC	R-943245	North Penn Gas Company	Cash Working Capital
10.	1994	NJ BPU	WR94070325	The Atlantic City Sewerage Company	Cost Allocation and Rate Design
11.	1995	Pa. PUC	R-953300	Citizens Utilities Water Company of Pennsylvania	Cost Allocation and Rate Design
12.	1995	Pa. PUC	R-953378	Apollo Gas Company	Revenue Requirements and Rate Design
13.	1995	Pa. PUC	R-953379	Carnegie Natural Gas Company	Revenue Requirements and Rate Design
14.	1996	Pa. PUC	R-963619	The York Water Company	Cost Allocation and Rate Design
15.	1997	Pa. PUC	R-973972	Consumers Pennsylvania Water Company - Shenango Valley Division	Cash Working Capital
16.	1998	Ohio PUC	98-178-WS-AIR	Citizens Utilities Company of Ohio	Water and Wastewater Cost Allocation and Rate Design
17.	1998	Pa. PUC	R-984375	City of Bethlehem - Bureau of Water	Revenue Requirement, Cost Allocation and Rate Design
18.	1999	Pa. PUC	R-994605	The York Water Company	Cost Allocation and Rate Design

No.	Year	Regulatory Body	Case No.	Utility Company	Testimony Subject
19.	1999	Pa. PUC	R-994868	Philadelphia Suburban Water Company	Cost Allocation and Rate Design
20.	1999	PSC of W.Va.	99-1570-W-MA	Clarksburg Water Board	Revenue Requirements (Rule 42), Cost Allocation and Rate Design
21.	2000	Ky. PSC	2000-120	Kentucky-American Water Company	Cost Allocation and Rate Design
22.	2000	Pa. PUC	R-00005277	PPL Gas Utilities	Cash Working Capital
23.	2000	NJ BPU	WR00080575	Atlantic City Sewerage Company	Cost Allocation and Rate Design
24.	2001	Ia. St Util Bd	RPU-01-4	Iowa-American Water Company	Cost Allocation and Rate Design
25.	2001	Va. St. Corp	PUE010312	Virginia-American Water Company	Cost Allocation and Rate Design
26.	2001	WV PSC	01-0326-W-42T	West-Virginia American Water Company	Cost Allocation And Rate Design
27.	2001	Pa. PUC	R-016114	City of Lancaster	Tapping Fee Study
28.	2001	Pa. PUC	R-016236	The York Water Company	Cost Allocation and Rate Design
29.	2001	Pa. PUC	R-016339	Pennsylvania-American Water Company	Cost Allocation and Rate Design
30.	2001	Pa. PUC	R-016750	Philadelphia Suburban Water Company	Cost Allocation and Rate Design
31.	2002	Va. St. Corp Cm	PUE-2002-00375	Virginia-American Water Company	Cost Allocation and Rate Design
32.	2003	Pa. PUC	R-027975	The York Water Company	Cost Allocation and Rate Design
33.	2003	Tn Reg. Auth	03-00118	Tennessee-American Water Company	Cost Allocation and Rate Design
34.	2003	Pa. PUC	R-038304	Pennsylvania-American Water Company	Cost Allocation and Rate Design
35.	2003	NJ BPU	WR03070511	New Jersey-American Water Company	Cost Allocation and Rate Design
36.	2003	Mo. PSC	WR-2003-0500	Missouri-American Water Company	Cost Allocation and Rate Design
37.	2004	Va. St. Corp Cm	PUE-200 -	Virginia-American Water Company	Cost Allocation and Rate Design
38.	2004	Pa. PUC	R-038805	Pennsylvania Suburban Water Company	Cost Allocation and Rate Design
39.	2004	Pa. PUC	R-049165	The York Water Company	Cost Allocation and Rate Design
40.	2004	NJ BPU	WRO4091064	The Atlantic City Sewerage Company	Cost Allocation and Rate Design
41.	2005	WV PSC	04-1024-S-MA	Morgantown Utility Board	Cost Allocation and Rate Design

No.	Year	Regulatory Body	Case No.	Utility Company	Testimony Subject
42.	2005	WV PSC	04-1025-W-MA	Morgantown Utility Board	Cost Allocation and Rate Design
43.	2005	Pa. PUC	R-051030	Aqua Pennsylvania, Inc.	Cost Allocation and Rate Design
44.	2006	Pa. PUC	R-051178	T. W. Phillips Gas and Oil Co.	Cost Allocation and Rate Design
45.	2006	Pa. PUC	R-061322	The York Water Company	Cost Allocation and Rate Design
46.	2006	NJ BPU	WR-06030257	New Jersey American Water Company	Cost Allocation and Rate Design
47.	2006	Pa. PUC	R-061398	PPL Gas Utilities, Inc.	Cost Allocation and Rate Design
48.	2006	NM PRC	06-00208-UT	New Mexico American Water Company	Cost Allocation and Rate Design
49.	2006	Tn Reg Auth	06-00290	Tennessee American Water Company	Cost Allocation and Rate Design
50.	2007	Ca. PUC	U-339-W	Suburban Water Systems	Water Conservation Rate Design
51.	2007	Ca. PUC	U-168-W	San Jose Water Company	Water Conservation Rate Design
52.	2007	Pa. PUC	R-00072229	Pennsylvania American Water Company	Cost Allocation and Rate Design
53.	2007	Ky. PSC	2007-00143	Kentucky American Water Company	Cost Allocation and Rate Design
54.	2007	Mo. PSC	WR-2007-0216	Missouri American Water Company	Cost Allocation and Rate Design
55.	2007	Oh. PUC	07-1112-WS-AIR	Ohio American Water Company	Cost Allocation and Rate Design
56.	2007	Il. CC	07-0507	Illinois American Water Company	Customer Class Demand Study
57.	2007	Pa. PUC	R-00072711	Aqua Pennsylvania, Inc.	Cost Allocation and Rate Design
58.	2007	NJ BPU	WR07110866	The Atlantic City Sewerage Company	Cost Allocation and Rate Design
59.	2007	Pa. PUC	R-00072492	City of Bethlehem – Bureau of Water	Revenue Reqmts, Cost Alloc.
60.	2007	WV PSC	07-0541-W-MA	Clarksburg Water Board	Cost Allocation and Rate Design
61.	2007	WV PSC	07-0998-W-42T	West Virginia American Water Company	Cost Allocation and Rate Design
62.	2008	NJ BPU	WR08010020	New Jersey American Water Company	Cost Allocation and Rate Design
63.	2008	Va St Corp Com	PUE-2008-00009	Virginia American Water Company	Cost Allocation and Rate Design
64.	2008	Tn. Reg. Auth.	08-00039	Tennessee American Water Company	Cost Allocation and Rate Design
65.	2008	Mo PSC	WR-2008-0311	Missouri American Water Company	Cost Allocation and Rate Design
66.	2008	De PSC	08-96	Artesian Water Company, Inc.	Cost Allocation and Rate Design

No.	Year	Regulatory Body	Case No.	Utility Company	Testimony Subject
67.	2008	Pa PUC	R-2008-2032689	Penna. American Water Co. – Coatesville Wastewater	Cost Allocation and Rate Design
68.	2008	AZ Corp. Comm.	W-01303A-08-0227 SW-01303A-08-0227	Arizona American Water Co. – Water Wastewater	Cost Allocation and Rate Design
69.	2008	Pa PUC	R-2008-2023067	The York Water Company	Cost Allocation and Rate Design
70.	2008	WV PSC	08-0900-W-42T	West Virginia American Water Company	Cost Allocation and Rate Design
71.	2008	Ky PSC	2008-00250	Frankfort Electric and Water Plant Board	Cost Allocation and Rate Design
72.	2008	Ky PSC	2008-00427	Kentucky American Water Company	Cost Allocation and Rate Design
73.	2009	Pa PUC	2008-2079660	UGI – Penn Natural Gas	Cost of Service Allocation
74.	2009	Pa PUC	2008-2079675	UGI – Central Penn Gas	Cost of Service Allocation
75.	2009	Pa PUC	2009-2097323	Pennsylvania American Water Co.	Cost Allocation and Rate Design
76.	2009	Ia St Util Bd	RPU-09-	Iowa-American Water Company	Cost Allocation and Rate Design
77.	2009	IL CC	09-0319	Illinois-American Water Company	Cost Allocation and Rate Design
78.	2009	Oh PUC	09-391-WS-AIR	Ohio-American Water Company	Cost Allocation and Rate Design
79.	2009	Pa PUC	R-2009-2132019	Aqua Pennsylvania, Inc.	Cost Allocation and Rate Design
80.	2009	Va St Corp Com	PUE-2009-00059	Aqua Virginia, Inc.	Cost Allocation (only)
81.	2009	Mo PSC	WR-2010-0131	Missouri American Water Company	Cost Allocation and Rate Design
82.	2010	Va St Corp Com	PUE-2010-00001	Virginia American Water Company	Cost Allocation and Rate Design
83.	2010	Ky PSC	2010-00036	Kentucky American Water Company	Cost Allocation and Rate Design
84.	2010	NJ BPU	WR10040260	New Jersey American Water Company	Cost Allocation and Rate Design
85.	2010	Pa PUC	2010-2167797	T.W. Phillips Gas and Oil Co.	Cost Allocation and Rate Design
86.	2010	Pa PUC	2010-2166212	Pennsylvania American Water Co. - Wastewater	Cost Allocation and Rate Design
87.	2010	Pa PUC	R-2010-2157140	The York Water Company	Cost Allocation and Rate Design
88.	2010	Ky PSC	2010-00094	Northern Kentucky Water District	Cost Allocation and Rate Design
89.	2010	WV PSC	10-0920-W-42T	West Virginia American Water Co.	Cost Allocation and Rate Design

No.	Year	Regulatory Body	Case No.	Utility Company	Testimony Subject
90.	2010	Tn Reg Auth	10-00189	Tennessee American Water Company	Cost Allocation and Rate Design
91.	2010	Ct Dept PU Cntrl	10-09-08	United Water Connecticut	Cost Allocation and Rate Design
92.	2010	Pa PUC	R-2010-2179103	City of Lancaster-Bureau of Water	Rev Rqmts, Cst Alloc/Rate Dsgn
93.	2011	Pa PUC	R-2010-2214415	UGI Central Penn Gas, Inc.	Cost Allocation
94.	2011	Pa PUC	R-2011-2232359	The Newtown Artesian Water Co.	Revenue Requirement
69.	2008	Pa PUC	R-2008-2023067	The York Water Company	Cost Allocation and Rate Design
70.	2008	WV PSC	08-0900-W-42T	West Virginia American Water Company	Cost Allocation and Rate Design
71.	2008	Ky PSC	2008-00250	Frankfort Electric and Water Plant Board	Cost Allocation and Rate Design
72.	2008	Ky PSC	2008-00427	Kentucky American Water Company	Cost Allocation and Rate Design
73.	2009	Pa PUC	2008-2079660	UGI – Penn Natural Gas	Cost of Service Allocation
74.	2009	Pa PUC	2008-2079675	UGI – Central Penn Gas	Cost of Service Allocation
75.	2009	Pa PUC	2009-2097323	Pennsylvania American Water Co.	Cost Allocation and Rate Design
76.	2009	Ia St Util Bd	RPU-09-	Iowa-American Water Company	Cost Allocation and Rate Design
77.	2009	Il CC	09-0319	Illinois-American Water Company	Cost Allocation and Rate Design
78.	2009	Oh PUC	09-391-WS-AIR	Ohio-American Water Company	Cost Allocation and Rate Design
79.	2009	Pa PUC	R-2009-2132019	Aqua Pennsylvania, Inc.	Cost Allocation and Rate Design
80.	2009	Va St Corp Com	PUE-2009-00059	Aqua Virginia, Inc.	Cost Allocation (only)
81.	2009	Mo PSC	WR-2010-0131	Missouri American Water Company	Cost Allocation and Rate Design
82.	2010	Va St Corp Com	PUE-2010-00001	Virginia American Water Company	Cost Allocation and Rate Design
83.	2010	Ky PSC	2010-00036	Kentucky American Water Company	Cost Allocation and Rate Design
84.	2010	NJ BPU	WR10040260	New Jersey American Water Company	Cost Allocation and Rate Design
85.	2010	Pa PUC	2010-2167797	T.W. Phillips Gas and Oil Co.	Cost Allocation and Rate Design
86.	2010	Pa PUC	2010-2166212	Pennsylvania American Water Co. - Wastewater	Cost Allocation and Rate Design
87.	2010	Pa PUC	R-2010-2157140	The York Water Company	Cost Allocation and Rate Design
88.	2010	Ky PSC	2010-00094	Northern Kentucky Water District	Cost Allocation and Rate Design
89.	2010	WV PSC	10-0920-W-42T	West Virginia American Water Co.	Cost Allocation and Rate Design

No.	Year	Regulatory Body	Case No.	Utility Company	Testimony Subject
90.	2010	Tn Reg Auth	10-00189	Tennessee American Water Company	Cost Allocation and Rate Design
91.	2010	Ct Dept PU Cntrl	10-09-08	United Water Connecticut	Cost Allocation and Rate Design
92.	2010	Pa PUC	R-2010-2179103	City of Lancaster-Bureau of Water	Rev Rqmts, Cst Alloc/Rate Dsgn
93.	2011	Pa PUC	R-2010-2214415	UGI Central Penn Gas, Inc.	Cost Allocation
94.	2011	Pa PUC	R-2011-2232359	The Newtown Artesian Water Co.	Revenue Requirement
95.	2011	Pa PUC	R-2011-2232243	Pennsylvania American Water Co.	Cost Allocation and Rate Design
96.	2011	Pa PUC	R-2011-2232985	United Water Pennsylvania Inc.	Demand Study, COS/Rate Dsgn
97.	2011	Pa PUC	R-2011-2244756	City of Bethlehem-Bureau of Water	Rev. Rqmts/COS/Rate Dsgn
98.	2011	Mo PSC	WR-2011-0337 WR-20110-0338	Missouri American Water Company	Cost Allocation and Rate Design
99.	2011	Oh PUC	11-4161-WS-AIR	Ohio American Water Company	Cost Allocation and Rate Design
100.	2011	NJ BPU	WR 11070460	New Jersey American Water Company	Cost Allocation and Rate Design
101.	2011	ID PUC	UWI-W-11-02	United Water Idaho Inc.	Cost Allocation and Rate Design