

UGI GAS STATEMENT NO. 4 – PAUL R. HERBERT

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Docket No. R-2015-2518438

UGI Utilities, Inc. – Gas Division

Statement No. 4

**Direct Testimony of
Paul R. Herbert**

Topics Addressed: Cost of Service Allocation

Date: January 19, 2016

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION
DOCKET NO. R-2015-2518438

RE: UGI UTILITIES, INC. - GAS DIVISION

DIRECT TESTIMONY OF PAUL R. HERBERT

Line
No.

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

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

4

5 **Q. By whom are you employed?**

6 A. I am employed by Gannett Fleming Valuation and Rate Consultants, LLC.

7

8 **Q. Please describe your position with Gannett Fleming Valuation and Rate**
9 **Consultants, LLC., and briefly state your general duties and responsibilities.**

10 A. I am President. My duties and responsibilities include the preparation of accounting
11 and financial data for revenue requirement and cash working capital claims, the
12 allocation of cost of service to customer classifications, and the design of customer rates
13 in support of public utility rate filings.

14

15 **Q. Have you presented testimony in rate proceedings before a regulatory agency?**

16 A. Yes. I have testified before the Pennsylvania Public Utility Commission, the New
17 Jersey Board of Public Utilities, the Public Utilities Commission of Ohio, the Public
18 Service Commission of West Virginia, the Kentucky Public Service Commission, the
19 Iowa State Utilities Board, the Virginia State Corporation Commission, the Illinois
20 Commerce Commission, the Tennessee Regulatory Authority, the California Public

1 Utilities Commission, New Mexico Public Regulation Commission, the Delaware
2 Public Service Commission, Arizona Corporate Commission, the Connecticut
3 Department of Public Utility Control, the Idaho Public Utilities Commission, the Hawaii
4 Public Utilities Commission, and the Missouri Public Service Commission concerning
5 revenue requirements, cost of service allocation, rate design and cash working capital
6 claims. A list of the cases in which I have testified is provided at the end of my direct
7 testimony.

8

9 **Q. What is your educational background?**

10 A. I have a Bachelor of Science Degree in Finance from the Pennsylvania State University,
11 University Park, Pennsylvania.

12

13 **Q. Would you please describe your professional affiliations?**

14 A. I am a member of the American Water Works Association and serve as a member of the
15 Management Committee for the Pennsylvania Section. I am also a member of the
16 Pennsylvania Municipal Authorities Association. In 1998, I became a member of the
17 National Association of Water Companies as well as a member of its Rates and Revenue
18 Committee.

19

20 **Q. Briefly describe your work experience.**

21 A. I joined the Valuation Division of Gannett Fleming Corddry and Carpenter, Inc.,
22 predecessor to Gannett Fleming Valuation and Rate Consultants, LLC, in September
23 1977, as a Junior Rate Analyst. Since then, I have advanced through several positions
24 and was assigned the position of Manager of Rate Studies on July 1, 1990. On June 1,

1 1994, I was promoted to Vice President and on November 1, 2003, I was promoted to
2 Senior Vice President. On July 1, 2007, I was promoted to my current position as
3 President.

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

9
10 **Q. What is the purpose of your testimony?**

11 A. I am providing testimony on behalf of UGI Utilities, Inc. - Gas Division ("UGI Gas" or
12 the "Company"). I will explain the cost of service allocation study
13

14 **COST OF SERVICE ALLOCATION STUDY**

15 **Q. What is the purpose of the cost of service allocation study?**

16 A. The purpose of the study is to allocate the total cost of service to the several service
17 classifications. I have prepared two cost of service studies that I will describe later as
18 well as summary schedules that present a simple average of the two studies. The studies
19 provide a basis for determining the extent to which the revenues to be derived from each
20 classification are commensurate with the cost of serving that classification.
21

22 **Q. Have you prepared a cost of service study for UGI Utilities, Inc. in a prior case?**

23 A. No. However, I prepared the cost of service studies in the UGI Penn Natural Gas, Inc.
24 rate case at Docket No. R-2008-2079660 and the UGI Central Penn Gas, Inc. rate cases

1 at Docket Nos. R-2008-2079675 and R-2010-2214415. In 2006, at Docket No. R-
2 00061398, I prepared the cost of service study for PPL Gas Utilities Corporation, the
3 predecessor of UGI Central Penn Gas, Inc.
4

5 **Q. What method of cost allocation was used in the studies?**

6 A. I used the Average and Extra Demand Method (Average/Excess), which is described in
7 UGI Gas Exhibit D and in the text, "Gas Rate Fundamentals", published by the
8 American Gas Association's Rate Committee.
9

10 **Q. Please describe the difference in the two cost of service studies presented for this**
11 **proceeding.**

12 A. The first study presented in Exhibit D, allocates mains investment to the interruptible
13 class on the basis of average daily volumes (excluding excess capacity). The second
14 study presented in Exhibit D-1, does not allocate any mains investment (except for
15 directly assigned mains for one customer) to the interruptible class. Exhibit D-2
16 presents the simple average of the two studies in the summary Schedule A-2 as well as
17 the rate of return schedules under present and proposed rates in Schedules B-2 and C-2,
18 respectively.
19

20 **Q. Please describe UGI Gas Exhibit D.**

21 A. UGI Gas Exhibit D titled, "Cost of Service Allocation Study as of September 30, 2017,"
22 is the first cost of service allocation study prepared for UGI Gas in support of its claims
23 in this proceeding. It sets forth the results of the study based on the projected costs and
24 conditions for the fully projected future test year for the twelve months ending

1 September 30, 2017 (“FPFTY”). The data in the exhibit include a description of the
2 *methods and procedures used in the study, the allocations of cost of service and measure*
3 *of value, the factors on which the allocations were based and an analysis of customer*
4 *costs.*

5
6 **Q. Please outline the procedure that you followed in the first cost allocation study.**

7 A. The detailed allocation of costs to cost functions and service classifications is presented
8 in Schedule E, pages 10 through 13, of UGI Gas Exhibit D. Gas costs are excluded
9 from the amounts in Schedule E in order to develop costs by function and classification
10 related to the delivery of gas.

11 In the detailed allocation, the items of cost, which include operating expenses,
12 depreciation expense, taxes, and income available for return, are identified in column 1
13 of Schedule E. The cost of each item, shown in column 3, is allocated to the several
14 service classifications: Residential (R and RT), Non-Residential (N and NT), Delivery
15 Service (DS), Large Firm Delivery Service (LFD), Extended Large Firm Delivery
16 Service (XD), and Interruptible Service (XD-1, IS and IL).

17 The allocation factor codes entered in column 2 enable one to determine the
18 specific basis for the allocation of each item. The factor codes refer to the information
19 presented in Schedule F, beginning on page 14, of the exhibit.

20
21 **Q. Please explain the allocation of some of the large cost items in the study.**

22 A. Referring to some of the larger delivery cost items, transmission costs and costs
23 associated with measuring and regulating stations were allocated partly on the basis of

1 average daily volumes and partly on the basis of demand in excess of average, or extra
2 demand, inasmuch as the function of these facilities is to meet peak requirements.

3 The costs related to distribution mains were first directly assigned to XD-Firm
4 and XD-Interruptible customers based on an analysis of the mains and the proportion
5 thereof serving each individual XD customer. The methods and procedures used to
6 determine the portion of mains directly assigned to XD customers were provided by
7 Company personnel. The remaining cost of mains was separated into small mains (2-
8 inch and smaller) and large mains (over 2-inch). Small mains were allocated to the Rate
9 R, N, DS, a portion of LFD, and small Interruptible (IS) classes based on the average
10 and extra capacity demand for each classification. Only 19% of the LFD consumption
11 was used for the allocation of small mains, inasmuch as only 19% of the customers
12 utilize mains that are 2-inch and smaller. Large mains were allocated in the same
13 manner except only the volumes for XD-Firm and XD-I customers were excluded.

14 Customers under Rate XD were excluded from the allocation of small and large
15 distribution mains since XD customers were directly assigned the cost of mains serving
16 them, as explained above. Interruptible volumes were removed from the extra capacity
17 calculations as these volumes can be curtailed during periods of peak demand.

18 Costs related to service lines in Account 380 were allocated to classes, after a
19 direct assignment to each of the XD customers, based on the cost of service lines by size
20 and the number of customers in each class. Costs related to meters in Account 381 and
21 the associated house regulators were allocated to the R, N, DS, and Interruptible service
22 classifications on the basis of the cost of meters for each class and the number of
23 customers. Costs related to industrial measuring and regulating in Account 385, after a
24 direct assignment to XD customers, were allocated to the N, LFD and Interruptible

1 Service classes based on the cost of measuring and regulating equipment assigned to
2 each class.

3
4 **Q. Please explain the allocation of uncollectible accounts and customer assistance
5 expenses.**

6 A. Uncollectible accounts associated with the gas cost portion are allocated consistent with
7 the recovery of such costs through the Merchant Function Charge (Rider D). The
8 remaining uncollectible account cost is recovered based on an analysis of write-offs.
9 Costs associated with customer assistance programs are allocated directly to the
10 residential class.

11
12 **Q. Please describe the allocation of customer accounting costs and the remaining cost
13 of service elements.**

14 A. Customer accounting costs were allocated to service classifications on the basis of the
15 number of customers. Administrative and general costs were allocated on the basis of
16 the allocated direct operation and maintenance costs, excluding gas production expenses
17 those costs being allocated.

18 Annual depreciation accruals were allocated on the basis of the function of the
19 facilities represented by the depreciation expense for each depreciable plant account.
20 Similarly, certain taxes other than income taxes, income taxes and income available for
21 return were allocated on the basis of allocated rate base, including the original cost less
22 accrued depreciation of utility plant in service and other rate base elements.

23
24 **Q. What are the results of the cost of service allocation study?**

1 A. The results of the cost of service allocation set forth in Schedule E are brought forward
2 and summarized in Schedule D. The total cost of service by classification in Schedule
3 D is then brought forward to Schedule A (without gas costs), columns 2 and 3, where
4 these results are compared to the *pro forma* revenues under present rates (columns 4 and
5 5) and proposed rates (columns 6 and 7). The proposed change in revenue under
6 proposed rates and the percent change are shown in columns 8 and 9 of Schedule A.
7 Please refer to the direct testimony of Paul Szykman (UGI Gas Statement No. 1) and
8 the direct testimony David Lahoff (UGI Gas Statement No. 6) for an explanation of the
9 proposed rate design and revenue distribution.

10

11 **Q. Did you prepare a schedule showing the rate of return by classification?**

12 A. Yes. Schedule B sets forth the rate of return by classification under present rates, and
13 Schedule C shows the rate of return by classification under proposed rates.

14

15 **Q. Did you prepare an analysis of customer costs?**

16 A. Yes. I prepared a fully allocated customer cost analysis and a direct customer cost
17 analysis. Both analyses of customer costs are presented in Schedule G of UGI Gas
18 Exhibit D.

19

20 **Q. Please explain the analysis of customer costs as set forth in UGI Gas Exhibit D.**

21 A. The customer costs were determined by allocating the cost of service to cost functions
22 and to service classifications. The volumetric and customer functional costs were
23 determined by an allocation of the total cost of service to these functions in Schedule E
24 of UGI Gas Exhibit D. The customer costs were further allocated to the R, N, DS, LFD,

1 XD, and Interruptible Service classifications in the same schedule. The factors that were
2 the bases for the allocation to cost functions and the allocation of customer costs to
3 classifications are presented in Schedule F. A summary of the customer costs and the
4 development of the costs per customer per month are presented in Schedule G.

5
6 **Q. Did you prepare an analysis of costs related to the demand charge for rate LFD
7 and XD Service?**

8 A. Yes. The analysis of costs related to the demand charges for LFD and XD Service is
9 presented in Schedule H of UGI Gas Exhibit D.

10
11 **Q. Please explain the analysis of the LFD and XD Service costs related to demand
12 charges as set forth in UGI Gas Exhibit D.**

13 A. The costs related to LFD and XD Service demand charges were determined by the
14 allocation of certain fixed costs, depreciation, taxes and return to these classifications.
15 The allocation was performed in Schedule E. A summary of the allocated costs and the
16 development of the unit demand costs are presented in Schedule H.

17
18 **Q. Please describe the second cost of service study in Exhibit D-1.**

19 A. The second cost of service study presented in Exhibit D-1 is the same as the first study
20 except for the allocation of mains investment. The second study does not allocate any
21 mains investment to the interruptible class except for the directly assigned mains
22 identified for the large XD-Interruptible customer. As a result of this change in
23 allocation of mains investment, composite allocation factors also change.

24

1 **Q. What is the rationale for not allocating any mains investment to the interruptible**
2 **class?**

3 A. The rationale for not allocating mains investment to interruptible customers is based on
4 the cost allocation premise that costs should be allocated based on the design of the
5 system facilities. The distribution system was designed to meet peak day requirements
6 for firm customers only. Interruptible customers would have no usage on the design
7 peak day as their volumes would be curtailed. The Company's investment in mains
8 would be the same whether or not there were interruptible customers on the system.
9 Therefore, allocating all mains investment to firm customers is reasonable.

10

11 **Q. Please summarize the results of the second cost of service study.**

12 A. The results of the second cost of service allocation (Exhibit D-1) set forth in Schedule
13 E-1 are brought forward and summarized in Schedule D-1. The total cost of service by
14 classification in Schedule D-1 is then brought forward to Schedule A-1 (without gas
15 costs), columns 2 and 3, where these results are compared to the pro forma revenues
16 under present rates (columns 4 and 5) and proposed rates (columns 6 and 7). The
17 proposed change in revenue under proposed rates and the percent change are shown in
18 columns 8 and 9 of Schedule A-1. Schedule B-1 and Schedule C-1 present the rate of
19 return by classification under present rates and proposed rates, respectively.

20

21 **Q. Please explain Exhibit D-2.**

22 A. Exhibit D-2 presents the simple average of the cost allocation studies from Exhibits D
23 and D-1. Exhibit D-2 sets forth the summary of the average cost or service by
24 classification in Schedule A-2 (columns 2 and 3) compared to revenues under present

1 and proposed rates, as well as the rate of return based on the average cost of service
2 allocation under present rates in Schedule B-2 and under proposed rates in Schedule C-
3 2.

4
5 **Q. Does that conclude your direct testimony?**

6 **A. Yes, it does.**

LIST OF CASES IN WHICH PAUL R. HERBERT TESTIFIED

<u>Year</u>	<u>Jurisdiction</u>	<u>Docket No.</u>	<u>Client/Utility</u>	<u>Subject</u>	
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
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.CorpCm	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-	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.CorpCm	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
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

LIST OF CASES IN WHICH PAUL R. HERBERT TESTIFIED

<u>Year</u>	<u>Jurisdiction</u>	<u>Docket No.</u>	<u>Client/Utility</u>	<u>Subject</u>	
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 Requirements, 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	VaStCorpCom	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
67.	2008	Pa PUC	R-2008-2032689	Penna. American Water Co. – Coatesville Wastewater	Cost Allocation and Rate Design
68.	2008	AZ Corp. Com.	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	VaStCorpCom	PUC-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	VaStCorpCom	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-	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
90.	2010	Tn Reg Auth	10-00189	Tennessee American Water Company	Cost Allocation and Rate Design
91.	2010	Ct PU Rg Ath	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 Design

LIST OF CASES IN WHICH PAUL R. HERBERT TESTIFIED

<u>Year</u>	<u>Jurisdiction</u>	<u>Docket No.</u>	<u>Client/Utility</u>	<u>Subject</u>	
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 Design
97.	2011	Pa PUC	R-2011-2244756	City of Bethlehem-Bureau of Water	Rev. Rqmts/COS/Rate Design
98.	2011	Mo PSC	WR-2011-0337-338	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	WR11070460	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
102.	2011	Il CC	11-0767	Illinois-American Water Company	Cost Allocation and Rate Design
103.	2011	Pa PUC	R-2011-2267958	Aqua Pennsylvania, Inc.	Cost Allocation and Rate Design
104.	2011	Va St Com	2011-00099	Aqua Virginia, Inc.	Cost Allocation
105.	2011	Va St Com	2011-00127	Virginia American Water Company	Cost Allocation and Rate Design
106.	2012	Tn RegAuth	12-00049	Tennessee American Water Company	Cost Allocation and Rate Design
107.	2012	Ky PSC	2012-00072	Northern Kentucky Water District	Cost Allocation and Rate Design
108.	2012	Pa PUC	R-2012-2310366	Lancaster, City of – Sewer Fund	Cost Allocation and Rate Design
109.	2012	Ky PSC	2012-00520	Kentucky American Water Co.	Cost Allocation and Rate Design
110.	2013	WV PSC	12-1649-W-42T	West Virginia American Water Co.	Cost Allocation and Rate Design
111.	2013	Ia St Util Bd	RPU-2013-000_	Iowa American Water Company	Cost Allocation and Rate Design
112.	2013	Pa PUC	R-2013-2355276	Pennsylvania American Water Co.	Cost Allocation and Rate Design
113.	2013	Pa PUC	R-2012-2336379	The York Water Company	Cost Allocation and Rate Design
114.	2013	Pa PUC	R-2013-2350509	City of DuBois – Bureau of Water	Cost Allocation and Rate Design
115.	2013	Pa PUC	R-2013-2390244	City of Bethlehem – Bureau of Water	Cost Allocation and Rate Design
116.	2014	Pa PUC	R-2014-2418872	City of Lancaster – Bureau of Water	Cost Allocation and Rate Design
117.	2014	Pa PUC	R-2014-2428304	Borough of Hanover	Cost Allocation and Rate Design
118.	2014	Va St Com	2014-00045	Aqua Virginia, Inc.	Cost Allocation
119.	2015	NJ BPU	WR15010035	New Jersey American Water Company	Cost Allocation and Rate Design
120.	2015	Pa PUC	R-2015-2462723	United Water PA	Cost Allocation and Rate Design
121.	2015	WV PSC		West Virginia American Water Company	Cost Allocation and Rate Design
122.	2015	Id PUC	UWI-W-15-01	United Water Idaho Inc.	Pro Forma Revenues