BEFORE THE
TENNESSEE REGULATORY AUTHORITY

DIRECT TESTIMONY OF
PAUL R. HERBERT

ON BEHALF OF TENNESSEE-AMERICAN WATER COMPANY

CASE NO. -_____

CONCERNING

COST OF SERVICE ALLOCATION

AND

CUSTOMER RATE DESIGN

JUNE 2012

BEFORE THE TENNESSEE REGULATORY AUTHORITY

RE: TENNESSEE-AMERICAN WATER COMPANY

CASE NO._____

DIRECT TESTIMONY OF PAUL R. HERBERT

Line No.

Q. Please state your name and address.

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

Q. By whom are you employed?

A. I am employed by Gannett Fleming, Inc.

Q. Please describe your position with Gannett Fleming, Inc. and briefly state your general duties and responsibilities.

A. I am 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.

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

A. 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 Tennessee Regulatory Authority, the California Public

Utilities Commission, New Mexico Public Regulation Commission, the Illinois Commerce Commission, the Delaware Public Service Commission, the Arizona Corporation Commission, the Connecticut Department of Public Utility Control, the Idaho Public Utilities Commission and the Missouri Public Service Commission concerning revenue requirements, cost of service allocation, rate design and cash working capital claims. A list of the cases in which I have testified is provided at the end of my direct testimony.

Q. What is your educational background?

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

Q. Would you please describe your professional affiliations?

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

Q. Briefly describe your work experience.

A. I joined the Valuation Division of Gannett Fleming Corddry and Carpenter, Inc., predecessor to Gannett Fleming, Inc., in September 1977, as a Junior Rate Analyst. Since then, I advanced through several positions and was assigned the position of Manager of Rate Studies on July 1, 1990. On June 1, 1994, I was promoted to Vice President of the Valuation and Rate Division and on July 1, 2007, I was promoted to my current position as President.

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

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to explain Tennessee-American Water Company's cost of service allocation study and proposed rate design set forth in Exhibit No. PRH-1.

COST OF SERVICE ALLOCATION

Q. Briefly describe the purpose of your cost allocation study.

A. The purpose of the study was to allocate the total cost of service, which is the total revenue requirement, to the several customer classifications. In the study, the total costs were allocated to the residential, commercial, industrial, public authorities, other water utilities, private fire protection and public fire protection classifications in accordance with generally accepted principles and procedures. The cost of service allocation results in indications of the relative cost responsibilities of each class of customers. The allocated cost of service is one of several criteria appropriate for consideration in designing customer rates to produce the required revenues. The results of my allocation of the pro forma cost of service as of November 30, 2013, and proposed customer rates to produce the pro forma revenue requirement as of that date are presented in the study.

Q. Please describe the method of cost allocation that was used in your study.

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

Q. Please describe the procedure followed in the cost allocation study.

A. Each identified classification of cost in the pro forma cost of service was allocated to the customer classifications through the use of appropriate factors. These allocations are presented in Schedule B on pages 8 through 14. The items of cost, which include operation and maintenance expenses, depreciation expense, taxes and income available for return, are identified in columns 1 and 2 of Schedule B. The cost of each item, shown in column 4, is allocated to the several customer classifications based on allocation factors referenced in column 3. The development of the allocation factors is presented in Schedule C. I will use some of the larger cost items to illustrate the principles and considerations used in the cost allocation methodology. Purchased water, purchased electric power, treatment chemicals and waste disposal are examples of costs that tend to vary with the amount of water consumed and are thus considered base costs. They are allocated to the

several customer classifications in direct proportion to the average daily consumption of those classifications through the use of Factor 1. The development of Factor 1 is shown in Schedule C on page 15.

Other source of supply, water treatment and transmission costs are associated with meeting usage requirements in excess of the average, generally to meet maximum day requirements. Costs of this nature were allocated to customer classifications partially as base costs, proportional to average daily consumption, partially as maximum day extra capacity costs, in proportion to maximum day extra capacity, and, in the case of certain pumping stations and transmission mains, partially as fire protection costs, through the use of Factors 2 and 3. The development of the allocation factors, referenced as Factors 2 and 3, is shown in Schedule C, on pages 16 through 19.

Costs associated with storage facilities and the capital costs of distribution mains were allocated partly on the basis of average consumption and partly on the basis of maximum hour extra demand, including the demand for fire protection service, because these facilities are designed to meet maximum hour and fire demand requirements. The development of the factors, referenced as Factors 4 and 5, used for these allocations is shown in Schedule C, on pages 20 through 24.

Factor 4, used to allocate distribution mains, is based on the same volumes used in Factors 1 through 3 except that the consumption for the larger industrial customers and other water utilities classifications are excluded. This is to recognize that larger industrial and sales for resale

customers are served primarily from larger mains. Factor 5, Allocation of Storage Facilities, uses the same basic methodology as Factor 4, although Factor 1 volumes are used and the fire demand weighting is based on the storage capacity for fire service as compared to the total storage capacity.

Fire demand costs were allocated to public and private fire protection service in proportion to the relative potential demands on the system by public fire hydrants and private service lines as presented in Schedule C on page 19.

Costs associated with pumping facilities and the operation and maintenance of mains were allocated on combined bases of maximum day and maximum hour extra capacity because these facilities serve both functions. For pumping facilities, the relative weightings of Factor 2 (maximum day), Factor 3 (maximum day and fire) and Factor 4 (maximum hour) were based on horsepower of pumps serving maximum day, maximum day and fire and maximum hour functions. The development of this weighted factor, referenced as Factor 6, is presented on page 25.

For operation and maintenance of mains, the relative weightings of Factor 3 (maximum day and fire) and Factor 5 (maximum hour) were based on the footage of transmission and distribution mains. For cost allocation purposes, mains larger than 10-inch were classified as serving a transmission function and mains 10-inch and smaller were classified as serving a distribution function. The development of this weighted factor, referenced as Factor 7, is presented on page 26.

Costs associated with meters were allocated to customer classifications in proportion to the capacity requirements of the sizes and quantities of meters serving each classification. The development of the factor for meters, referenced as Factor 10, is presented on page 26. Factor 11, Allocation of Services, was developed in a similar manner as Factor 10, except that the relative unit cost per foot by service size was used in order to weight the number of services by classification. Costs associated with public fire hydrants were assigned directly to the public fire protection class (Factor 21).

Costs for customer accounting, billing and collecting were allocated on the basis of the number of customers for each classification, and costs for meter reading were allocated on the basis of metered customers. The development of these factors, referenced as Factor 12 and Factor 13, is presented on page 32.

Administrative and general costs were allocated on the basis of allocated direct costs, excluding those costs such as purchased water, power, chemicals and waste disposal which require little administrative and general expense. The development of factors for this allocation, referenced as Factor 14, is presented on page 33.

Annual depreciation accruals were allocated on the basis of the function of the facilities represented by the depreciation expense for each depreciable plant account. The original cost less depreciation of utility plant in service was similarly allocated for the purpose of developing factors,

referenced as Factor 17, for allocating items such as income taxes and return. The development of Factor 17 is presented on pages 34 through 37.

Factors 14 and 17, as well as Factors 8, 9, 15, 16 and 18, are composite 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.

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

A. The pro forma costs of service were furnished by the Company, and are set forth in various Company exhibits.

Q. Refer to Schedule B, pages 17 and 21, and explain the source of the system maximum day and maximum hour ratios used in the development of factors referenced as Factors 2, 3 and 4.

A. The ratios were based on a review of historic Company data. The maximum day ratio of 1.45 times the average day approximates the ratio of maximum daily send-out experienced by the Company in the last five years. The maximum hour ratio of 1.9 times the average hour was estimated based on the relationship of system maximum hour ratios compared to system maximum day ratios for other similar systems.

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

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

Q. Have you summarized the results of your cost allocation study?

A. Yes. The results are summarized in columns 1, 2 and 3 of Schedule A on page 6. Column 2 sets forth the total allocated pro forma cost of service as of November 30, 2013, for each customer classification identified in column 1. Column 3 presents each customer classification's cost responsibility as a percent of the total cost.

Q. Have you compared these cost responsibilities with the proportionate revenue under existing rates for each customer classification?

A. Yes. A comparison of the allocated cost responsibilities and the percentage revenue under existing rates can be made by comparing columns 3 and 5 of Schedule A. A similar comparison of the percentage cost responsibilities (relative cost of service) and the percentage of pro forma revenues (relative revenues) under proposed rates can be made by comparing columns 3 and 7 of Schedule A.

CUSTOMER RATE DESIGN

Q. What are the appropriate factors to be considered in the design of the rate structure?

A. In preparing a rate structure, one should consider the allocated costs of service, the impact of radical changes from the present rate structure, the

understandability and ease of application of the rate structure, community and social influences, and the value of service. General guidelines should be developed with management to determine the extent to which each of these criteria is to be incorporated in the rate structure to be designed, inasmuch as the pricing of a commodity or service is a function of management.

Q. Did management discuss rate design guidelines with you?

A. Yes, they did. The guidelines were to increase service charges and volumetric rates so that the revenue from each class moves toward cost of service. In addition, the Company proposes to merge the Lookout Mountain and Lakeview Tariffs into one Mountain Tariff and begin the process of merging Lone Oak and Suck Creek to the Mountain Tariff.

Q. Does the proposed rate design follow these guidelines?

A. Yes, it does. The revenues under proposed rates reflects increases by class ranging from 21.9% to 29.9% which move each class closer to the cost of service, with the exception of Other Water Utilities. Revenue from the Other Water Utilities class was increased by 5.4%, due to the competitive sources of water available for this class. Also, merging the mountain service areas into one tariff reflects the similar service characteristics of these areas. The tariffs for Lone Oak and Suck Creek will begin to merge to the Mountain Tariff by adopting the basic blocking structure and consumption rates of the Mountain Tariff. This results in revenues slightly less than revenues under present rates for these two areas. However; the average residential bill for

Lone Oak and Suck Creek will remain higher than the average bill for Mountain tariff customers.

Q. Do you propose an alternative blocking structure for the Other Water Utilities' class?

A. Yes, I propose a two block structure for this customer class. The first block consists of the first 45,000 CCF of consumption per month and is priced at $1.15 per CCF for base-load usage. The second block for consumption over 45,000 CCF is priced at $2.00 per CCF. This blocking structure is to recognize the higher costs required to meet peak demands and to discourage peaking of certain customers in this class during the summer months.

Q. Have you prepared comparisons of present and proposed rates for each classification and each rate zone?

A. Yes. Schedule D on pages 43 through 45 of the cost allocation study presents comparisons of the present and proposed rates.

Q. Does this conclude your direct testimony?

A. Yes, it does.

PAUL R. HERBERT – LIST OF CASES TESTIFIED

	Year	Jurisdiction	Docket No.	Client/Utility	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
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-	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
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

PAUL R. HERBERT – LIST OF CASES TESTIFIED

	Year	Jurisdiction	Docket No.	Client/Utility	Subject
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
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.	S009	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
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 Design
98.	2011	Mo PSC	WR-2011-0337338	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

PAUL R. HERBERT – LIST OF CASES TESTIFIED

	Year	Jurisdiction	Docket No.	Client/Utility	Subject
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	NJ BPU	WR11070460	New Jersey American Water Company	Cost Allocation and Rate Design
103	2011	Il CC		Illinois American Water Company	Cost Allocation and Rate Design
104.	2011	Pa PUC	R-2011-2267958	Aqua Pennsylvania, Inc.	Cost Allocation and Rate Design

COMMONWEALTH OF PENNSYLVANIA

COUNTY OF CUMBERLAND

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Paul R. Herbert, being by me first duly sworn deposed and said that:

He is appearing as a witness on behalf of Tennessee-American Water Company before the Tennessee Regulatory Authority, and if present before the Authority and duly sworn, his testimony would set forth in the annexed transcript.

Paul R. Herbert

Sworn to and subscribed before me
this 24th day of May, 2012.

Notary Public

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Cheryl Ann Rutter, Notary Public
East Pennsboro Twp., Cumberland County
My Commission Expires Feb. 20, 2015
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

TENNESSEE AMERICAN WATER COMPANY

Chattanooga, Tennessee

COST OF SERVICE ALLOCATION STUDY

AS OF NOVEMBER 30, 2013

AND

PROPOSED CUSTOMER RATES

GANNETT FLEMING, INC. - VALUATION AND RATE DIVISION

Harrisburg, Pennsylvania

Gannett Fleming

Excellence Delivered As Promised

June 1, 2012

Tennessee American Water Company
P.O. Box 6638
Chattanooga, TN 37401

Attention Deron E. Allen, President

Gentlemen:

Pursuant to your request, we have conducted a cost of service allocation study based on pro forma revenue requirements estimated for the test year ended November 30, 2013, and have prepared proposed rate schedules designed to produce the pro forma revenue requirements.

The attached report presents the results of the study, as well as supporting schedules which set forth the detailed cost allocation calculations. Schedule A on page 6 presents a comparison of the cost of service by customer classification with the pro forma revenues produced by each classification under present and proposed rates.

Respectfully submitted,

GANNETT FLEMING, INC.
Valuation and Rate Division

Paul R Herbert

PAUL R. HERBERT
President

CONSTANCE E. HEPPENSTALL
Rate Analyst

PRH/krm

055500

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PART I. INTRODUCTION

TENNESSEE AMERICAN WATER COMPANY

COST OF SERVICE ALLOCATION STUDY
AS OF NOVEMBER 30, 2013
AND PROPOSED CUSTOMER RATES

PART I. INTRODUCTION

PLAN OF REPORT

The report sets forth the results of the cost of service allocation study as of November 30, 2013, prepared for Tennessee American Water Company. Part I, Introduction, contains statements with respect to the basis of the study, the procedures employed, and a summary of the results of the study. Part II, Cost of Service by Customer Classification, presents detailed schedules of the allocation of costs to customer classifications, as well as the bases for the allocations. Part III, Proposed Customer Rates, sets forth the proposed rate structure.

BASIS OF THE STUDY

The purpose of the study was to allocate costs to several customer classifications based on considerations of quantity of water consumed, variability of rate of flow, and costs associated with metering, billing and accounting. The allocation study was based on recognized procedures for allocating the several categories of costs to customer classifications in proportion to each classification's use of the facilities, commodities and services which entail the total cost of providing water service.

ALLOCATION PROCEDURES

The allocation study was based on the Base-Extra Capacity Method for allocating costs to customer classifications. The method is described in the 2000 and prior editions

of the Water Rates Manual, published by the American Water Works Association. The four basic categories of cost responsibility are base, extra capacity, customer and fire protection costs. The following discussions present a brief description of these costs and the manner in which they were allocated.

Base Costs are costs that tend to vary with the quantity of water used, plus costs associated with supplying, treating, pumping and distributing water to customers under average load conditions, without the elements necessary to meet peak demands. Base costs were allocated to customer classifications on the basis of average daily usage.

Extra Capacity Costs are costs associated with meeting usage requirements in excess of the average. They include operating and capital costs for additional plant and system capacity beyond that required for average use. The extra capacity costs in this study are subdivided into costs necessary to meet maximum day extra demand and costs to meet maximum hour extra demand. The extra capacity costs were allocated to customer classifications on the bases of each classification's maximum day and hour usage in excess of average usage. (Extra capacity costs related to fire protection are allocated directly to the fire protection classifications.)

Customer Costs are costs associated with serving customers regardless of their usage or demand characteristics. Customer costs include the operating and capital costs related to meters and services, meter reading costs, and billing and collecting costs. The customer costs were allocated on the bases of the relative cost of meters and services, the number of meter readings and the number of bills.

Fire Protection Costs are costs associated with providing the facilities to meet the potential peak demand of fire protection service. Fire protection costs are subdivided into

costs to meet Public Fire Protection and Private Fire Protection demands. Operating and capital costs for hydrants were assigned directly to Public Fire Protection. The extra capacity costs assigned to fire protection service were allocated to Public and Private Fire Protection on the basis of the total relative demands of the hydrants and fire service lines.

RESULTS OF STUDY

The data summarized in Schedule A, "Comparison of Pro Forma Cost of Service with Revenues Under Present and Proposed Rates for the Twelve Months Ended November 30, 2013," constitute the principal results of the allocation study.

The cost of service by customer classification, shown in column 2 of Schedule A, is developed in Schedule B, "Allocation of Cost of Service to Customer Classifications for the Twelve Months Ended November 30, 2013". The allocation of the total cost of service to the several customer classifications was performed by applying the allocation factors referenced in column 3 to the cost of service by account in column 4. The bases of the allocation factors are presented in Schedule C.

DESIGN OF PROPOSED RATES

The results of the cost of service allocation study were discussed with Company management in order that it be afforded the opportunity of performing its role in the design of proposed rates. The rate design guidelines developed during the discussion were to incease service charges and volumetric rates so that each classification moves approximately toward its cost of service.

In addition, the rates for Lookout Mountain and Lakeview will be merged into the proposed Mountain service area tariff. The tariffs for Lone Oak and Suck Creek will begin

a phase-in to the Mountain Tariff by adopting the same blocking structure and volumetric rates in this case.

The proposed rate structure, as presented in Part III, Proposed Customer Rates, Schedule D, consists of service charges by meter size and volumetric rates by class and service area. The revenue resulting from the proposed rate structure are shown in columns 6 and 7 of Schedule A, and maintain the existing alignment with the cost of service shown in columns 2 and 3.

TENNESSEE-AMERICAN WATER COMPANY

COMPARISON OF PRO FORMA COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2013

Customer Classification	Pro Forma Cost of Service, as of November 30, 2013		Pro Forma Revenues Under Present Rates		Pro Forma Revenues Under Proposed Rates		Proposed Increase	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Residential	$26,795,269	51.8%	$17,869,565	43.4%	$23,213,091	45.0%	$5,343,526	29.9%
Commercial	13,957,020	27.1%	12,821,743	31.1%	16,206,234	31.4%	3,384,491	26.4%
Industrial	4,205,917	8.2%	3,789,555	9.2%	4,620,151	9.0%	830,596	21.9%
Other Public Authority	3,765,882	7.3%	3,139,425	7.6%	3,889,649	7.5%	750,224	23.9%
Other Water Utilities	2,058,326	4.0%	1,559,017	3.8%	1,643,311	3.2%	84,294	5.4%
Private Fire Protection	805,151	1.6%	2,014,854	4.9%	2,014,854	3.9%	0	0.0%
Total Sales of Water	51,587,565	100.0%	41,194,160	100.0%	51,587,291	100.0%	10,393,131	25.2%
Other Water Revenues	1,841,293		1,648,355		1,841,293		192,938	11.7%
Total	$53,428,858		$42,842,515		$53,428,584		$10,586,069	24.7%

Schedule A

PART II. COST OF SERVICE BY CUSTOMER CLASSIFICATION

TENNESSEE-AMERICAN WATER COMPANY

ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2013

Account Number	Account Description	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities	Private Fire Protection	Public Fire Protection
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
OPERATION AND MAINTENANCE EXPENSES										
	Source of Supply									
	----Operation----									
601.1	Operating Labor	2		$0	$0	$0	$0	$0	$0	$0
601.1	Operating Expense	2	33,621	11,882	9,955	5,430	2,962	3,234	57	101
610.1	Purchased Water	1	50,159	16,613	14,426	9,219	4,289	5,267	125	221
	----Maintenance----									
601.2	Maintenance Labor	2	104	37	31	17	9	10	0	0
620.2	Materials and Supplies	2	120,950	42,744	35,813	19,534	10,656	11,635	206	363
	Subtotal Source of Supply		204,834	71,276	60,225	34,200	17,916	20,146	388	685
	Power and Pumping Expenses									
	----Operation----									
601.1	Operating Labor	6	1,411,159	501,244	420,384	205,606	125,170	119,666	14,112	24,978
601.1	Purchased Power	1	2,391,079	791,925	687,674	439,480	204,437	251,063	5,978	10,521
615.2	Purchased Power - Lookout Mtn.	19	268,220	219,163	40,233	0	8,824	0	0	0
615.3	Purchased Power - Lakeview	20	93,460	81,544	10,196	168	1,551	0	0	0
620.1	Materials and Supplies	6	4,860	1,726	1,448	708	431	412	49	86
	Subtotal Power and Pumping		4,168,778	1,595,602	1,159,935	645,962	340,413	371,141	20,139	35,585
	Water Treatment Expenses									
	----Operation----									
601.3	Supervision & Engin. Labor	2	0	0	0	0	0	0	0	0
601.3	General Labor	2	0	0	0	0	0	0	0	0
618.3	General Chemicals	1	1,030,128	341,178	296,265	189,337	88,076	108,163	2,575	4,533
620.3	Electricity, Oil and Gas	2	68,177	24,093	20,187	11,011	6,006	6,559	116	205
620.3	Misc. Expenses	2	56,153	19,845	16,627	9,069	4,947	5,402	95	168
635.3	Other Operations Contract Svcs.	2	33,888	11,976	10,034	5,473	2,986	3,260	58	102
641.3	Rents	2	5,741	2,029	1,700	927	506	552	10	17
650.3	Waste Disposal - Current	1	208,436	69,034	59,946	38,311	17,821	21,886	521	917
675.3	Materials and Supplies	2	86,631	30,615	25,652	13,991	7,632	8,334	147	260

TENNESSEE-AMERICAN WATER COMPANY

ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2013

Account Number	Account Description	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities	Private Fire Protection	Public Fire Protection
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	----Maintenance----									
620.4	Structures & Improvements Materials	2	88,419	31,247	26,181	14,280	7,790	8,506	150	265
635.4	Lab Supplies	2	26,866	9,495	7,955	4,339	2,367	2,585	46	81
635.4	Other Maintenance Contract Services	2	19,769	6,987	5,854	3,193	1,742	1,902	34	59
	Subtotal Water Treatment		1,624,209	546,499	470,401	289,931	139,873	167,149	3,752	6,607
	Transmission & Distribution Expenses									
	----Operation----									
601.5	T&D Operation Super & Eng	8	243,480	148,620	65,715	6,890	15,485	1,534	1,899	3,336
601.5	T&D Operation Labor	8	139,911	85,402	37,762	3,959	8,898	881	1,091	1,917
601.5	Misc Meter Labor	10	345,232	245,666	79,403	4,937	14,914	311	0	0
635.5	Other T & D Oper Contract Services	7	177,717	73,486	61,739	9,881	18,358	2,968	4,105	7,180
650.5	Operations Transportation	8	0	0	0	0	0	0	0	0
675.5	Electricity, Oil and Gas	8	17,327	10,576	4,676	490	1,102	109	135	237
675.5	Misc T&D Expenses	8	53,822	32,853	14,527	1,523	3,423	339	420	737
	----Maintenance----									
601.6	T&D Supervision & Engin. Labor	9	56,522	25,898	15,973	2,363	4,494	695	1,707	5,392
601.6	T&D Mains Labor	7	662,017	273,744	229,985	36,808	68,386	11,056	15,293	26,745
601.6	T&D Services Labor	11	239,495	187,763	28,524	814	3,281	24	19,088	0
601.6	T&D Meters Labor	10	16,017	11,397	3,684	229	692	14	0	0
601.7	T&D Hydrants Labor	21	94,855	0	0	0	0	0	0	94,855
601.7	Other T&D Plant Labor	9	3,550	1,627	1,003	148	282	44	107	339
620.6	T&D Paving/Backfill	7	395,976	163,736	137,562	22,016	40,904	6,613	9,147	15,997
620.6	T&D Struct & Imp-Materials	9	252,947	115,900	71,483	10,573	20,109	3,111	7,639	24,131
635.6	Other T & D Maint Contract Services	9	2,550	1,168	721	107	203	31	77	243
650.6	Maintenance Transportation	9	3,378	1,548	955	141	269	42	102	322
675.6	Misc. Maintenance Meters	10	33,973	24,175	7,814	486	1,468	31	0	0
675.6	Other T&D Plant Materials	9	15,502	7,103	4,381	648	1,232	191	468	1,479
	Subtotal Transmission & Distribution		2,754,270	1,410,662	765,907	102,013	203,500	27,994	61,278	182,910

TENNESSEE-AMERICAN WATER COMPANY

ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2013

Account Number	Account Description	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities	Private Fire Protection	Public Fire Protection
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Customer Accounting Expenses									
601.7	Meter Reading Labor	13	430,360	377,898	47,383	861	4,174	43	0	0
620.7	Misc Customer Expenses	12	5,127	4,421	554	10	49	1	92	1
632.7	Contract Services	12	13,585	11,713	1,469	27	129	1	245	1
635.7	Other Contract Services	12	344,533	297,056	37,244	689	3,273	34	6,202	34
642.7	Rents	12	452	390	49	1	4	0	8	0
670.7	Uncollectible Accounts	23	461,142	423,928	37,214	0	0	0	0	0
675.7	Customer Acctg-Billing/Telephone	12	8,070	6,958	872	16	77	1	145	1
675.8	Customer Acctg-Billing/Postage	12	364,505	314,276	39,403	729	3,463	36	6,561	36
675.7	Forms	12	125,541	108,241	13,571	251	1,193	13	2,260	13
675.7	Misc Customer Services	12		0	0	0	0	0	0	0
	Subtotal Customer Accounting		1,753,316	1,544,881	177,759	2,584	12,362	129	15,513	86
	Administrative and General Expenses									
601.8	Adm & General Salaries	14	1,907,124	1,076,762	450,081	117,479	114,809	59,121	27,081	61,791
604.8	Employee Pensions & Benefits	15	3,503,387	1,853,642	870,942	239,982	227,720	121,918	50,799	138,384
604.9	401K Contributions Expense	15	89,881	47,556	22,344	6,157	5,842	3,128	1,303	3,550
632.8	Auditing Services	14	62,113	35,069	14,659	3,826	3,739	1,926	882	2,012
633.8	Legal Services	14	240,307	135,678	56,712	14,803	14,466	7,450	3,412	7,786
6348.0	Management Fees - Water Quality	1	138,656	45,923	39,877	25,485	11,855	14,559	347	610
6348.0	Management Fees - Cust. Billing/Service	12	1,141,484	984,188	123,394	2,283	10,844	114	20,547	114
6348.0	Management Fees - Administration	14	4,292,698	2,423,657	1,013,077	264,430	258,420	133,074	60,956	139,083
6348.0	Management Fees - Empl. Service	15	243,728	128,957	60,591	16,695	15,842	8,482	3,534	9,627
6358.0	Contract Services - Other	14	61,057	34,473	14,409	3,761	3,676	1,893	867	1,978
641.8	Rental - Real Property	14	1,246	704	294	77	75	39	18	40
642.8	Rental - Equipment	14	935	528	221	58	56	29	13	30
650.8	Transportation	14	359,914	203,207	84,940	22,171	21,667	11,157	5,111	11,661
657.8	General Liability	14	222,102	125,399	52,416	13,681	13,371	6,885	3,154	7,196
658.8	Workmens Comp Premium Exp	15	109,728	58,057	27,278	7,516	7,132	3,819	1,591	4,334
659.8	Insurance Other	14	33,227	18,760	7,842	2,047	2,000	1,030	472	1,077
660.8	Advertising Exp	14	27,011	15,250	6,375	1,664	1,626	837	384	875
666.8	Regulatory Commission Expenses	18	626,950	311,594	162,317	48,902	43,761	25,015	9,780	25,580

TENNESSEE-AMERICAN WATER COMPANY

ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2013

Account Number	Account Description	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities	Private Fire Protection	Public Fire Protection
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
675.8	Expenses Of Employees	15	19,475	10,304	4,842	1,334	1,266	678	282	769
675.8	Misc. General Expense	14	490,116	276,719	115,667	30,191	29,505	15,194	6,960	15,880
675.8	Misc. Maintenace and M&S	14	77,199	43,586	18,219	4,755	4,647	2,393	1,096	2,501
675.8	Miscellaneous General Exp	14	159,595	90,107	37,664	9,831	9,608	4,947	2,266	5,171
675.8	Security Service	14	123,946	69,980	29,251	7,635	7,462	3,842	1,760	4,016
657.8	AFUDC Adjustment	14		-	-	-	-	-	-	-
	Subtotal Administrative and General		13,931,880	7,990,100	3,213,412	844,763	809,389	427,530	202,615	444,065
	Total Operation & Maintenance Expenses		24,437,287	13,159,020	5,847,639	1,919,453	1,523,453	1,014,089	303,685	669,938

TENNESSEE-AMERICAN WATER COMPANY

ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2013

Account Number	Account Description	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities	Private Fire Protection	Public Fire Protection
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
DEPRECIATION EXPENSE				0						
	Intangible									
339.70	Comprehensive Planning Study	14	29,415	16,608	6,942	1,812	1,771	912	418	953
	Source of Supply									
304.10	Structures and Improvements	2	1,582	559	469	256	139	152	3	5
306.00	Lakes, Rivers, & Other Intakes	2	4,060	1,435	1,202	656	358	391	7	12
306.00	Other P/E SS	2	399	141	118	64	35	38	1	1
309.00	Supply Mains	2	11,292	3,990	3,343	1,824	995	1,086	19	34
	Pumping Equipment									
304.20	Pumping Structures	6	103,868	36,894	30,942	15,134	9,213	8,808	1,039	1,838
	Lookout Mountain Tariff	19	475	388	71	0	16	0	0	0
	Lakeview Tariff	20	49	43	5	0	1	0	0	0
310.00	Power Generation Equipment -other	6	44,622	15,850	13,293	6,501	3,958	3,784	446	790
311.20	Electric Pumping Equipment	6	126,514	44,938	37,688	18,433	11,222	10,728	1,265	2,239
	Lookout Mountain Tariff	19	7,511	6,137	1,127	0	247	0	0	0
	Lakeview Tariff	20	2,302	2,008	251	4	38	0	0	0
311.20	Diesel Pumping Equipment	6	2,982	1,059	888	435	265	253	30	53
311.50	Other Pumping Equipment	6	20,814	7,393	6,201	3,033	1,846	1,765	208	368
	Water Treatment									
304.00	Water Treatment Structures	2	424,736	150,102	125,764	68,595	37,419	40,860	722	1,274
320.20	Water Treatment Equipment	2	161,874	57,206	47,931	26,143	14,261	15,572	275	486
320.20	Granular Activated Carbon	2	742,316	262,334	219,800	119,884	65,398	71,411	1,262	2,227
	Transmission & Distribution									
304.40	T & D Structures	7	32,940	13,621	11,443	1,831	3,403	550	761	1,331
330.00	T & D Reservoirs & Standpipes	5	135,559	46,090	38,648	19,859	11,495	11,346	2,942	5,178
	Lookout Mountain Tariff	19	4,185	3,420	628	0	138	0	0	0
	Lakeview Tariff	20	0	0	0	0	0	0	0	0
330.00	T & D Reservoirs & Standpipes-Painting	5	652,950	222,003	186,156	95,657	55,370	54,652	14,169	24,943
	Lookout Mountain Tariff	19	0	0	0	0	0	0	0	0
	Lakeview Tariff	20	17,950	15,662	1,958	32	298	0	0	0

TENNESSEE-AMERICAN WATER COMPANY

ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2013

Account Number	Account Description	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities	Private Fire Protection	Public Fire Protection
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
330.10	Elevated Tanks & Standpipes	5	58,917	20,032	16,797	8,631	4,996	4,931	1,278	2,251
330.20	Ground Level Facilities	5	669	227	191	98	57	56	15	26
330.30	Below Ground Tanks	5	511	174	146	75	43	43	11	20
330.40	Clearwells	2	11,233	3,970	3,326	1,814	990	1,081	19	34
331.00	T & D Mains not Classified	4	145,373	62,249	52,320	4,870	15,569	0	3,765	6,600
331.00	T & D Mains - Mains (4" or less)	4	73,637	31,532	26,502	2,467	7,887	0	1,907	3,343
331.00	T & D Mains - Mains (6" - 8")	4	18	8	7	1	2	0	0	1
331.00	T & D Mains - Mains (6" - 10") TN	4	660,856	282,979	237,842	22,139	70,778	0	17,116	30,003
331.00	T & D Mains - Mains (10" - 16")	3	122,703	42,357	35,498	19,363	10,552	11,546	1,227	2,160
331.00	T & D Mains - Mains (12" or More)	3	359,606	124,136	104,034	56,746	30,926	33,839	3,596	6,329
331.00	T & D Mains - Mains (18" or Greater)	3	8,150	2,813	2,358	1,286	701	767	81	143
333.00	Services	11	243,150	190,629	28,959	827	3,331	24	19,379	0
334.10	Meters	10	448,634	319,248	103,186	6,415	19,381	404	0	0
334.10	Meters-Metal Case/Old Style	10	324,358	230,813	74,602	4,638	14,012	292	0	0
334.10	Meters - Plastic Case	10	617	439	142	9	27	1	0	0
334.10	Meters - Metal Case/New Style	10	1,295	921	298	19	56	1	0	0
334.20	Meter Installations	10	321,110	228,502	73,855	4,592	13,872	289	0	0
335.00	Hydrants	21	180,587	0	0	0	0	0	0	180,587
	General Plant									
304.50	Structures and Imp. General	14	8,164	4,609	1,927	503	491	253	116	265
304.60	Office Structures	14	10,059	5,679	2,374	620	606	312	143	326
304.70	Stores , Shop, & Garage Structures	14	2,282	1,289	539	141	137	71	32	74
304.80	Structures and Imp. Misc.	14	3,209	1,812	757	198	193	99	46	104
340.10	Office Furniture	14	6,818	3,849	1,609	420	410	211	97	221
340.20	Computer & Peripheral Equipment	14	6,802	3,840	1,605	419	409	211	97	220
340.20	Computer and Mainframe Equipment	14	14,173	8,002	3,345	873	853	439	201	459
340.20	Computer & Periph Personal	14	11,669	6,588	2,754	719	702	362	166	378
340.20	Computer & Periph Other	14	8,908	5,031	2,102	549	536	276	126	289
340.30	Computer Software	14	10,510	5,935	2,480	647	633	326	149	341
340.30	Computer Software Mainframe	14	64,880	36,631	15,312	3,997	3,906	2,011	921	2,102
340.30	Computer Software	14	504,865	285,048	119,148	31,100	30,393	15,651	7,169	16,358
340.30	Computer Software	12	220,605	190,206	23,847	441	2,096	22	3,971	22
340.30	Computer Software Personal	14	3,131	1,768	739	193	189	97	44	101
340.30	Computer Software Other	14	260	147	61	16	16	8	4	8
340.40	Data Handling Equipment	14	755	426	178	47	45	23	11	24
340.50	Other Office Equipment	14	440	249	104	27	27	14	6	14
341.10	Light Trucks	14	187,375	105,792	44,221	11,542	11,280	5,809	2,661	6,071
341.20	Heavy Trucks	14	304,288	171,801	71,812	18,744	18,318	9,433	4,321	9,859
341.30	Automobiles	14	51,005	28,798	12,037	3,142	3,071	1,581	724	1,653
341.40	Transportation-Other	14	33,036	18,652	7,797	2,035	1,989	1,024	469	1,070
342.00	Stores Equipment	14	1,736	980	410	107	104	54	25	56
343.00	Tools, Shop, & Garage Equipment	14	91,584	51,708	21,614	5,642	5,513	2,839	1,300	2,967
344.00	Laboratory Equipment	2	3,995	1,412	1,183	645	352	384	7	12
345.00	Power Operated Equipment	14	20,180	11,394	4,762	1,243	1,215	626	287	654

TENNESSEE-AMERICAN WATER COMPANY

ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2013

Account Number	Account Description	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities	Private Fire Protection	Public Fire Protection
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
346.10	Communication Equipment Non telephone'	14	14,783	8,347	3,489	911	890	458	210	479
346.19	Remote Control Equipment	14	7,366	4,159	1,738	454	443	228	105	239
346.20	Communication Equipment-Telephone	14	3,170	1,790	748	195	191	98	45	103
347.00	Miscellaneous Equipment	14	69,683	39,343	16,445	4,292	4,195	2,160	990	2,258
348.00	Other Tangible Plant	14	251	142	59	15	15	8	4	8
	Total Depreciation Expense		7,155,805	3,454,337	1,860,127	604,020	500,284	320,670	96,408	319,964
AMORTIZATIONS										
675.10	Amortization Cost of Removal	16	19,790	9,060	5,585	1,356	1,559	623	427	1,180
680.00	Amortization of Regulatory Asset	16	1,650	755	466	113	130	52	36	98
680.30	Amortization of UPAA	16	519	238	146	36	41	16	11	31
680.52	Amortization of Utility Capital Lease	14	7,348	4,148	1,734	453	442	228	104	238
	Total Depreciation & Amortization		7,185,111	3,468,538	1,868,058	605,978	502,456	321,589	96,986	321,511
TAXES OTHER THAN INCOME TAXES										
685.20	Property Taxes	16	3,473,602	1,590,215	980,250	237,942	273,720	109,418	75,030	207,027
685.32	FUTA	15	6,353	3,362	1,579	435	413	221	92	251
685.33	FICA	15	466,753	246,959	116,035	31,973	30,339	16,243	6,768	18,437
685.35	SUTA	15	15,485	8,193	3,850	1,061	1,007	539	225	612
685.43	Other Taxes and Licenses	18	432,068	214,738	111,862	33,701	30,158	17,239	6,740	17,628
685.00	PSC Fee	18	139,736	69,449	36,178	10,899	9,754	5,575	2,180	5,701
685.44	Gross Receipts Tax	18	819,652	407,367	212,208	63,933	57,212	32,704	12,787	33,442
	Total Taxes Other Than Income Taxes		5,353,649	2,540,283	1,461,962	379,944	402,603	181,939	103,822	283,098
INCOME TAXES										
409.15	Federal and State Income Taxes	17	5,274,805	2,432,212	1,465,341	391,391	407,215	189,893	106,024	282,730
	Total Income Taxes		5,274,805	2,432,212	1,465,341	391,391	407,215	189,893	106,024	282,730
UTILITY OPERATING INCOME		17	11,178,007	5,154,181	3,105,250	829,408	862,942	402,408	224,678	599,141
	Total Cost of Service		53,428,858	26,754,234	13,748,250	4,126,174	3,698,669	2,109,918	835,195	2,156,418
	Less:									
	Other Fees	18	(1,291,649)	(641,949)	(334,408)	(100,749)	(90,157)	(51,537)	(20,150)	(52,699)
	Billing Services	12	(549,644)	(473,903)	(59,417)	(1,099)	(5,222)	(55)	(9,894)	(55)
	Total Cost of Service Related to Sales		51,587,565	25,638,382	13,354,425	4,024,326	3,603,290	2,058,326	805,151	2,103,664
	Allocation of Public Fire			1,156,887	602,595	181,591	162,592	0	0	(2,103,664)
	Total		51,587,565	$26,795,269	$13,957,020	$4,205,917	$3,765,882	$2,058,326	$805,151	$0

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 1. ALLOCATION OF COSTS WHICH VARY WITH THE AMOUNT OF WATER CONSUMED

Factors are based on the pro forma test year average daily consumption for each customer classification.

Customer Classification	Average Daily Consumption, 100 Cu. Ft.	Allocation Factor
(1)	(2)	(3)
Residential	12,021	0.3312
Commercial	10,442	0.2876
Industrial	6,673	0.1838
Other Public Authority	3,105	0.0855
Other Water Utilities	3,813	0.1050
Private Fire Protection	90	0.0025
Public Fire Protection	158	0.0044
Total	36,302	1.0000

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 2. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND MAXIMUM DAY EXTRA CAPACITY FUNCTIONS.

Factors are based on the weighting of the factors for average daily consumption (Factor 1) and the factors derived from maximum day extra capacity demand for each customer classification, as follows:

	Average Daily Consumption		Maximum Day Extra Capacity		
Customer Classification	Allocation Factor 1	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor
(1)	(2)	(3)=(2)x 0.6897	(4)	(5)=(4)x 0.3103	(6)=(3)+(5)
Residential	0.3312	0.2284	0.4028	0.1250	0.3534
Commercial	0.2876	0.1984	0.3150	0.0977	0.2961
Industrial	0.1838	0.1268	0.1118	0.0347	0.1615
Other Public Authority	0.0855	0.0590	0.0937	0.0291	0.0881
Other Water Utilities	0.1050	0.0724	0.0767	0.0238	0.0962
Private Fire Protection	0.0025	0.0017			0.0017
Public Fire Protection	0.0044	0.0030			0.0030
Total	1.0000	0.6897	1.0000	0.3103	1.0000

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 2. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND MAXIMUM DAY EXTRA CAPACITY FUNCTIONS, cont.

Customer Classification	Average Daily Consumption, 100 Cu. Ft.	Maximum Day Extra Capacity Factor*	Maximum Day Extra Capacity Rate of Flow, 100 Cu. Ft. Per Day	Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)
Residential	12,021	1.0	12,021	0.4028
Commercial	10,442	0.9	9,398	0.3150
Industrial	6,673	0.5	3,337	0.1118
Other Public Authority	3,105	0.9	2,795	0.0937
Other Water Utilities	3,813	0.6	2,288	0.0767
Subtotal	36,054		29,838	1.0000

The weighting of the factors is based on the maximum day ratio of 1.45, based on a review of maximum day ratios experienced during the period 1995 through 2011.

	Maximum Day Ratio	Weight
Average Day	1.00	0.6897
Maximum Day Extra Capacity	0.45	0.3103
Total	1.45	1.0000

* Ratio of maximum day to average day minus 1.0.

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 3. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE, MAXIMUM DAY AND FIRE SERVICE FUNCTIONS.

Factors are based on the weighting of the factors for average daily consumption (Factor 1), the factors derived from maximum day extra capacity demand and the fire protection demand by each customer classification, as follows:

Customer Classification	Average Daily Consumption Allocation Factor 1	Average Daily Consumption Weighted Factor	Maximum Day Extra Capacity Allocation Factor	Maximum Day Extra Capacity Weighted Factor	Fire Protection Allocation Factor	Fire Protection Weighted Factor	Allocation Factor
(1)	(2)	(3)=(2)x 0.6739	(4)	(5)=(4)x 0.3032	(6)	(7)=(6)x 0.0229	(8)=(3)+(5)+(7)
Residential	0.3312	0.2231	0.4028	0.1221			0.3452
Commercial	0.2876	0.1938	0.3150	0.0955			0.2893
Industrial	0.1838	0.1239	0.1118	0.0339			0.1578
Other Public Authority	0.0855	0.0576	0.0937	0.0284			0.0860
Other Water Utilities	0.1050	0.0708	0.0767	0.0233			0.0941
Private Fire Protection	0.0025	0.0017			0.3633	0.0083	0.0100
Public Fire Protection	0.0044	0.0030			0.6367	0.0146	0.0176
Subtotal	1.0000	0.6739	1.0000	0.3032	1.0000	0.0229	1.0000

The weighting of the factors is based on the maximum day ratio of 1.45 and the system demand for fire protection, as shown below. The fire protection factors in column 6 are developed on the following page.

	Maximum Day Ratio	System Delivery, GPD	Weight
Average Day	1.00	37,058,015	0.6739
Maximum Day Extra Capacity	0.45	16,676,107	0.3032
Subtotal	1.45	53,734,122	0.9771
Fire Protection		1,260,000	0.0229
Total		54,994,122	1.0000

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

BASIS FOR ALLOCATION OF DEMAND-RELATED COSTS OF
FIRE SERVICE TO PRIVATE AND PUBLIC FIRE PROTECTION

Description	Restrictive Diameter(s) Squared	Number of Units	Relative Demand	Allocation Factor
(1)	(2)	(3)	(4)=(2)X(3)	(5)
Private Fire Protection				
1 -Inch Fire Line	1	0	0	
1.5 -Inch Fire Line	2.25	1	2	
2 -Inch Fire Line	4	18	73	
2.5 -Inch Fire Line	6.25	1	6	
3 -Inch Fire Line	9	2	18	
4 -Inch Fire Line	16	117	1,869	
6 -Inch Fire Line	36	896	32,250	
8 -Inch Fire Line	64	318	20,377	
10 -Inch Fire Line	100	15	1,498	
12 -Inch Fire Line	144	19	2,745	
Total Private Fire Protection		1,387	58,839	0.3633
Public Fire Protection				
4-1/2 inch, 3 way	20.25	5,092	103,113	
Total Public Fire Protection		5,092	103,113	0.6367
Total Fire Protection Service		6,479	161,952	1.0000

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE, MAXIMUM HOUR AND FIRE SERVICE FUNCTIONS.

Factors are based on the weighting of the factors for the adjusted average hour consumption, the factors derived from maximum hour extra capacity demand and the fire protection demand by each customer classification, as follows:

	Average Hour Consumption		Maximum Hour Extra Capacity		Fire Protection		
Customer Classification	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor
(1)	(2)	(3)=(2)x 0.4912	(4)	(5)=(4)x 0.4420	(6)	(7)=(6)x 0.0668	(8)=(3)+(5)+(7)
Residential	0.4450	0.2186	0.4744	0.2096			0.4282
Commercial	0.3867	0.1899	0.3846	0.1700			0.3599
Industrial	0.0441	0.0217	0.0266	0.0118			0.0335
Other Public Authority	0.1150	0.0565	0.1144	0.0506			0.1071
Other Water Utilities	0.0000	0.0000	0.0000	0.0000			0.0000
Private Fire Protection	0.0033	0.0016			0.3633	0.0243	0.0259
Public Fire Protection	0.0059	0.0029			0.6367	0.0425	0.0454
Subtotal	1.0000	0.4912	1.0000	0.4420	1.0000	0.0668	1.0000

The weighting of the factors and the maximum hour extra capacity factors in column 4 are shown on the following page.

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE, MAXIMUM HOUR AND FIRE SERVICE FUNCTIONS.

Customer Classification	Average Hour Consumption, 100 Cu. Ft.	Maximum Hour Extra Capacity Factor*	Maximum Hour Extra Capacity Rate of Flow, 100 Cu. Ft. Per Hour	Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)
Residential	501	3.0	1,503	0.4744
Commercial	435	2.8	1,218	0.3846
Industrial	50	1.7	84	0.0266
Other Public Authority	129	2.8	362	0.1144
Other Water Utilities	0	1.7	0	0.0000
Total	1,115		3,168	1.0000

The weighting of the factors is based on the maximum hour ratio of 1.90 and the system demand for fire protection, as follows:

	Maximum Hour Ratio	System Delivery, GPM	Weight
Average Hour	1.0	25,735	0.4912
Maximum Hour Extra Capacity	0.9	23,162	0.4420
Subtotal	1.9	48,897	0.9332
Fire Protection		3,500	0.0668
Total		52,397	1.0000

* Ratio of maximum hour to average day minus 1.0.

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5. ALLOCATION OF COSTS ASSOCIATED WITH STORAGE FACILITIES.

Factors are based on the weighting of the factors for average hour consumption (Factor 1), the factors derived from maximum hour extra capacity demand and the fire protection demand by each customer classification, as follows:

Customer Classification	Average Hour Consumption		Maximum Hour Extra Capacity		Fire Protection		
	Allocation Factor 1	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor
(1)	(2)	(3)=(2)x 0.4966	(4)	(5)=(4)x 0.4469	(6)	(7)=(6)x 0.0565	
Residential	0.3312	0.1645	0.3928	0.1755			0.3400
Commercial	0.2876	0.1428	0.3184	0.1423			0.2851
Industrial	0.1838	0.0913	0.1235	0.0552			0.1465
Other Public Authority	0.0855	0.0425	0.0947	0.0423			0.0848
Other Water Utilities	0.1050	0.0521	0.0706	0.0316			0.0837
Private Fire Protection	0.0025	0.0012			0.3633	0.0205	0.0217
Public Fire Protection	0.0044	0.0022			0.6367	0.0360	0.0382
Subtotal	1.0000	0.4966	1.0000	0.4469	1.0000	0.0565	1.0000

The weighting of the factors and the maximum hour extra capacity factors in column 4 are shown on the following page.

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5. ALLOCATION OF COSTS ASSOCIATED WITH STORAGE FACILITIES.

Customer Classification	Average Hour Consumption, 100 Cu. Ft.	Maximum Hour Extra Capacity Factor*	Maximum Hour Extra Capacity Rate of Flow, 100 Cu. Ft. Per Hour	Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)
Residential	501	3.0	1,503	0.3928
Commercial	435	2.8	1,218	0.3184
Industrial	278	1.7	473	0.1235
Other Public Authority	129	2.8	362	0.0947
Other Water Utilities	159	1.7	270	0.0706
Total	1,502		3,826	1.0000

* Ratio of maximum hour to average day minus 1.0.

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5. ALLOCATION OF COSTS ASSOCIATED WITH STORAGE FACILITIES.

The weighting of the factors is based on the ratio of the capacity required for a 6-hour demand of fire flow, as related to total storage capacity.

Fire Protection Weight = $\frac{3{,}500 \text{ GPM} \times 60 \text{ min.} \times 6 \text{ Hours}}{22{,}311{,}000 \text{ Gallons Storage}} = 0.0565$

General Service Weight = 1 - 0.0565 = 0.9435

The weighting of the average hourly consumption and maximum hour extra demand for general service is based on the maximum hour ratio, as follows.

	Maximum Hour Ratio	Percent	Weight
Average Hour	1.0	52.63	0.4966
Extra Capacity Maximum Hour	0.9	47.37	0.4469
Total	1.9	100.00	0.9435

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 6. ALLOCATION OF COSTS ASSOCIATED WITH POWER AND PUMPING FACILITIES.

Factors are based on the weighting of the factors for maximum daily demand (Factor 2), maximum day extra capacity and fire demand (Factor 3) and maximum hour extra capacity and fire demand (Factor 4) for each customer classification.

	Maximum Day Extra Capacity		Maximum Day Extra Capacity and Fire		Maximum Hour Extra Capacity and Fire		
Customer Classification	Allocation Factor 2	Weighted Factor	Allocation Factor 3	Weighted Factor	Allocation Factor 4	Weighted Factor	Allocation Factor
(1)	(2)	(3)=(2)x 0.1927	(4)	(5)=(4)x 0.7041	(6)	(7)=(6)x 0.1032	(8)=(3)+(5)+(7)
Residential	0.3534	0.0681	0.3452	0.2430	0.4282	0.0441	0.3552
Commercial	0.2961	0.0571	0.2893	0.2037	0.3599	0.0371	0.2979
Industrial	0.1615	0.0311	0.1578	0.1111	0.0335	0.0035	0.1457
Other Public Authority	0.0881	0.0170	0.0860	0.0606	0.1071	0.0111	0.0887
Other Water Utilities	0.0962	0.0185	0.0941	0.0663	-	-	0.0848
Private Fire Protection	0.0017	0.0003	0.0100	0.0070	0.0259	0.0027	0.0100
Public Fire Protection	0.0030	0.0006	0.0176	0.0124	0.0454	0.0047	0.0177
Subtotal	1.0000	0.1927	1.0000	0.7041	1.0000	0.1032	1.0000

The weighting of the factors is based on an analysis of pumping equipment by function, as follows:

	Horse Power of Pumps	Weight
Maximum Day Extra Capacity	2,700	0.1927
Maximum Day Extra Capacity and Fire	9,865	0.7041
Maximum Hour Extra Capacity and Fire	1,446	0.1032
Total	14,011	1.0000

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 7. ALLOCATION OF COSTS ASSOCIATED WITH TRANSMISSION AND DISTRIBUTION MAINS.

Factors are based on the weighting of the factors for maximum day extra capacity and fire demand (Factor 3) and maximum hour extra capacity and fire demand (Factor 4) for each customer classification, as follows:

Customer Classification	Maximum Day Extra Capacity and Fire Allocation Factor 3	Maximum Day Extra Capacity and Fire Weighted Factor	Maximum Hour Extra Capacity and Fire Allocation Factor 4	Maximum Hour Extra Capacity and Fire Weighted Factor	Allocation Factor
(1)	(2)	(3)=(2)x 0.1779	(4)	(5)=(4)x 0.8221	(6)=(3)+(5)
Residential	0.3452	0.0614	0.4282	0.35	0.4135
Commercial	0.2893	0.0515	0.3599	0.2959	0.3474
Industrial	0.1578	0.0281	0.0335	0.0275	0.0556
Other Public Authority	0.0860	0.0153	0.1071	0.0880	0.1033
Other Water Utilities	0.0941	0.0167	-	-	0.0167
Private Fire Protection	0.0100	0.0018	0.0259	0.0213	0.0231
Public Fire Protection	0.0176	0.0031	0.0454	0.0373	0.0404
Total	1.0000	0.1779	1.0000	0.8221	1.0000

The weighting of the factors is based on the footage of transmission and distribution mains as set forth below:

	Footage of Mains	Weight
Transmission Mains	1,215,175	0.1779
Distribution Mains	5,616,906	0.8221
Total	6,832,081	1.0000

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 8. ALLOCATION OF TRANSMISSION AND DISTRIBUTION OPERATIONS AND SUPERVISION EXPENSES.

Factors are based on the allocation of transmission and distribution operation labor, as follows:

Customer Classification	Transmission & Distribution Operating Labor	Allocation Factor
(1)	(2)	(3)
Residential	$319,152	0.6104
Commercial	141,142	0.2699
Industrial	14,818	0.0283
Other Public Authority	33,272	0.0636
Other Water Utilities	3,279	0.0063
Private Fire Protection	4,105	0.0078
Public Fire Protection	7,180	0.0137
Total	$522,948	1.0000

FACTOR 9. ALLOCATION OF TRANSMISSION AND DISTRIBUTION MAINTENANCE SUPERVISION EXPENSES.

Factors are based on the allocation of transmission and distribution maintenance labor, as follows:

Customer Classification	Transmission & Distribution Maintenance Labor	Allocation Factor
(1)	(2)	(3)
Residential	$660,815	0.4582
Commercial	407,569	0.2826
Industrial	60,353	0.0418
Other Public Authority	114,731	0.0795
Other Water Utilities	17,738	0.0123
Private Fire Protection	43,528	0.0302
Public Fire Protection	137,597	0.0954
Total	$1,442,331	1.0000

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 10. ALLOCATION OF COSTS ASSOCIATED WITH METERS.

Factors are based on the relative cost of meters by size as developed on the following page and summarized below:

Customer Classification	Meter Equivalents	Allocation Factor
(1)	(2)	(3)
Residential	66,906	0.7116
Commercial	21,627	0.2300
Industrial	1,348	0.0143
Other Public Authority	4,061	0.0432
Other Water Utilities	83	0.0009
Subtotal	94,025	1.0000

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.
BASIS FOR ALLOCATING METER COSTS TO CUSTOMER CLASSIFICATIONS

		Residential		Commercial		Industrial		Other Public Authority		Other Water Utilities		Total	
Meter Size	5/8" Equivalent	Number of Meters	Weighting	Number of Meters	Weighting	Number of Meters	Weighting	Number of Meters	Weighting	Number of Meters	Weighting	Number of Meters	Weighting
(1)	(2)	(3)	(4)=(2)x(3)	(5)	(6)=(2)x(5)	(7)	(8)=(2)x(7)	(9)	(10)=(2)x(9)	(11)	(12)=(2)x(11)	(12)	(13)=(2)x(12)
5/8-inch	1.0	65,879	65,879	5,191	5,191	22	22	183	183	-	-	71,275	71,275
3/4-inch	1.5	128	192	131	197	2	3	13	20	-	-	274	411
1-inch	2.5	271	678	1,463	3,658	21	53	139	348	-	-	1,894	4,735
1-1/2-inch	5.0	17	85	370	1,850	6	30	71	355	-	-	464	2,320
2-inch	8.0	9	72	1,077	8,616	80	640	295	2,360	1	8	1,462	11,696
3-inch	15.0	-	-	42	630	-	-	8	120	-	-	50	750
4-inch	25.0	-	-	25	625	16	400	21	525	3	75	65	1,625
6-inch	50.0	-	-	14	700	4	200	3	150	-	-	21	1,050
8-inch	80.0	-		2	160	-		-		-		2	160
Total		66,304	66,906	8,315	21,627	151	1,348	733	4,061	4	83	75,507	94,022

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 11. ALLOCATION OF COSTS ASSOCIATED WITH SERVICES.

Factors are based on the relative cost of services by size as developed on the following page and summarized below:

Customer Classification	Service Equivalents	Allocation Factor
(1)	(2)	(3)
Residential	66,377	0.7840
Commercial	10,083	0.1191
Industrial	282	0.0034
Other Public Authority	1,163	0.0137
Other Water Utilities	11	0.0001
Private Fire Protection	6,751	0.0797
Subtotal	84,667	1.0000

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.
BASIS FOR ALLOCATING SERVICES COSTS TO CUSTOMER CLASSIFICATIONS

Meter Size	3/4" Equivalent	Residential		Commercial		Industrial		Other Public Authority		Other Water Utilities		Private Fire Service		Total	
		Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting
(1)	(2)	(3)	(4)=(2)x(3)	(5)	(6)=(2)x(5)	(7)	(8)=(2)x(7)	(9)	(10)=(2)x(9)	(11)	(12)=(2)x(11)	(13)	(14)=(2)x(13)	(15)	(16)=(2)x(15)
3/4-inch	1.0	66,007	66,007	5,322	5,322	24	24	196	196	0	0	0	0	71,549	71,549
1-inch	1.2	271	325	1,463	1,756	21	25	139	167	0	0	0	0	1,894	2,273
1-1/2-inch	1.6	17	27	370	592	6	10	71	114	0	0	1	2	465	744
2-inch	2.0	9	18	1,077	2,154	80	160	295	590	1	2	19	39	1,481	2,963
3-inch	2.7	0	0	42	113	0	0	8	22	0	0	2	5	52	140
4-inch	2.9	0	0	25	73	16	46	21	61	3	9	117	339	182	527
6-inch	4.2	0	0	14	59	4	17	3	13	0	0	896	3,762	917	3,851
8-inch	7.0	0	0	2 0	14	0	0	0	0	0	0	318	2,229	320	2,243
10-inch	9.5	0	0	0	0	0	0	0	0	0	0	15	142	15	142
12-inch	12.2	0	0	0	0	0	0	0	0	0	0	19	233	19	233
Total		66,304	66,377	8,315	10,083	151	282	733	1,163	4	11	1,387	6,751	76,894	84,665

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 12. ALLOCATION OF CUSTOMER ACCOUNTING COSTS.

Factors are based on the number of bills by classification, as follows:

Customer Classification	Number of Bills	Allocation Factor
(1)	(2)	(3)
Residential	795,645	0.8622
Commercial	99,784	0.1081
Industrial	1,811	0.0020
Other Public Authority	8,798	0.0095
Other Water Utilities	49	0.0001
Private Fire Protection	16,649	0.0180
Public Fire Protection	132	0.0001
Total	922,867	1.0000

FACTOR 13. ALLOCATION OF METER READING COSTS.

Factors are based on the number of meter readings by classification, as follows:

Customer Classification	Number of Meter Readings	Allocation Factor
(1)	(2)	(3)
Residential	795,645	0.8781
Commercial	99,784	0.1101
Industrial	1,811	0.0020
Other Public Authority	8,798	0.0097
Other Water Utilities	49	0.0001
Total	906,087	1.0000

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 14. ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSE.

Factors are based on the allocation of operation and maintenance expenses excluding power and chemicals, as follows:

Customer Classification	Operation and Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	$3,649,463	0.5646
Commercial	1,525,487	0.2360
Industrial	398,175	0.0616
Other Public Authority	389,066	0.0602
Other Water Utilities	200,180	0.0310
Private Fire Protection	91,871	0.0142
Public Fire Protection	209,681	0.0324
Total	$6,463,923	1.0000

FACTOR 15. ALLOCATION OF LABOR RELATED TAXES AND BENEFITS.

Factors are based on the allocation of operation and maintenance labor expense, as follows:

Customer Classification	Labor Expense	Allocation Factor
(1)	(2)	(3)
Residential	$2,936,058	0.5291
Commercial	1,379,928	0.2486
Industrial	380,111	0.0685
Other Public Authority	360,594	0.0650
Other Water Utilities	193,399	0.0348
Private Fire Protection	80,378	0.0145
Public Fire Protection	219,353	0.0395
Total	$5,549,821	1.0000

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 16. ALLOCATION OF INTANGIBLE PLANT AND OTHER RATE BASE ELEMENTS.

Factors are based on the allocation of utility plant in service less depreciation, follows:

Customer Classification	Utility Plant in Serivce Less Depreciation Reserve	Allocation Factor
(1)	(2)	(3)
Residential	$77,395,274	0.4578
Commercial	47,730,766	0.2822
Industrial	11,585,568	0.0685
Other Public Authority	13,334,156	0.0788
Other Water Utilities	5,329,839	0.0315
Private Fire Protection	3,657,908	0.0216
Public Fire Protection	10,085,825	0.0596
Total	$169,119,336	1.0000

FACTOR 17. ALLOCATION OF INCOME TAXES AND INCOME AVAILABLE FOR RETURN.

Factors are based on the allocation of original cost rate base, as shown on the following pages and summarized below.

Customer Classification	Original Cost Rate Base	Allocation Factor
(1)	(2)	(3)
Residential	$62,625,497	0.4611
Commercial	37,732,028	0.2778
Industrial	10,084,376	0.0742
Other Public Authority	10,480,226	0.0772
Other Water Utilities	4,888,770	0.0360
Private Fire Protection	2,733,161	0.0201
Public Fire Protection	7,276,192	0.0536
Total	$135,820,250	1.0000

TENNESSEE-AMERICAN WATER COMPANY

ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2013

Account Number	Account Description	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities	Private Fire Protection	Public Fire Protection
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
UTILITY PLANT IN SERVICE LESS DEPRECIATION										
	Intangible									
339600	Comprehensive Planning Study	16	324,965	148,769	91,705	22,260	25,607	10,236	7,019	19,368
	Source of Supply									
303.00	Land & Land Rights	2	73,444	25,955	21,747	11,861	6,470	7,065	125	220
304.21	Struct & Improv SS	2	74,150	26,204	21,956	11,975	6,533	7,133	126	222
305.00	Collecting and Impound Res	2	0							
306.20	Lakes, Rivers, & Other Intakes	2	220,365	77,877	65,250	35,589	19,414	21,199	375	661
307.00	Wells and Springs	2	0	-	-	-	-	-	-	-
308.00	Infiltration Galleries and Tunnels	2	0	-	-	-	-	-	-	-
309.00	Supply Mains	2	467,391	165,176	138,395	75,484	41,177	44,963	795	1,402
311.52	Pump Equipment Source of Supply	2	557,383	196,979	165,041	90,017	49,105	53,620	948	1,672
339.00	Other Source of Supply Plant & Equip.	2	1,336	472	396	216	118	129	2	4
	Pumping Equipment									
304.22	Pumping Structures	6	3,618,886	1,285,428	1,078,066	527,272	320,995	306,882	36,189	64,054
	Lookout Mountain Tariff	19	1,227	1,003	184	-	40	-	-	-
	Lakeview Tariff	20	905	790	99	2	15	-	-	-
310.20	Power Generation Equipment	6	173,544	61,643	51,699	25,285	15,393	14,717	1,735	3,072
311.22	Electric Pumping Equipment	6	2,377,157	844,366	708,155	346,352	210,854	201,583	23,772	42,076
	Lookout Mountain Tariff	19	201,376	164,544	30,206	-	6,625	-	-	-
	Lakeview Tariff	20	38,634	33,708	4,215	70	641	-	-	-
311.23	Diesel Pumping Equipment	6	53,471	18,993	15,929	7,791	4,743	4,534	535	946
311.27	Other Pumping Equipment	6	145,961	51,845	43,482	21,266	12,947	12,377	1,460	2,584
	Water Treatment									
303.00	Land & Land Rights	2	18,009	6,364	5,332	2,908	1,587	1,732	31	54
304.30	Water Treatment Structures	2	3,492,593	1,234,282	1,034,157	564,054	307,697	335,987	5,937	10,478
304.30	Water Treatment Structures	2	-562,711	(198,862)	(166,619)	(90,878)	(49,575)	(54,133)	(957)	(1,688)
320.31	Water Treatment Equipment	2	5,018,693	1,773,606	1,486,035	810,519	442,147	482,798	8,532	15,056
320.33	Granular Activated Carbon	2	1,025,633	362,459	303,690	165,640	90,358	98,666	1,744	3,077
	Transmission & Distribution									
303.00	Land & Land Rights	7	555,958	229,889	193,140	30,911	57,430	9,284	12,843	22,461
304.40	T & D Structures	7	1,051,518	434,803	365,297	58,464	108,622	17,560	24,290	42,481
330.40	Clearwell	2	428,788	151,534	126,964	69,249	37,776	41,249	729	1,286
330.41	T & D Reservoirs & Standpipes	5	4,308,419	1,464,862	1,228,330	631,183	365,354	360,615	93,493	164,582
	Lookout Mountain Tariff	19	79,181	64,699	11,877	-	2,605	-	-	-
	Lakeview Tariff	20	0	-	-	-	-	-	-	-

TENNESSEE-AMERICAN WATER COMPANY

ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2013

Account Number	Account Description	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities	Private Fire Protection	Public Fire Protection
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
330.42	T & D Reservoirs & Standpipes-Painting	5	2,950,464	1,003,158	841,177	432,243	250,199	246,954	64,025	112,708
	Lookout Mountain Tariff	19	0	-	-	-	-	-	-	-
	Lakeview Tariff	20	46,313	40,408	5,053	83	769	-	-	-
330.43	Elevated Tanks & Standpipes	5	1,175,314	399,607	335,082	172,183	99,667	98,374	25,504	44,897
330.20	Ground Level Facilities	5	23,230	7,898	6,623	3,403	1,970	1,944	504	887
330.30	# Below Ground Facilities	5	17,621	5,991	5,024	2,581	1,494	1,475	382	673
331.00	T & D Mains not Classified	4	9,185,199	3,933,102	3,305,753	307,704	983,735	-	237,897	417,008
331.10	T & D Mains - Mains (4" or less)	4	4,815,436	2,061,970	1,733,076	161,317	515,733	-	124,720	218,621
331.20	T & D Mains - Mains (6" - 8")	4	948	406	341	32	102	-	25	43
331.21	T & D Mains - Mains (6" - 10")	4	51,192,107	21,920,460	18,424,039	1,714,936	5,482,675	-	1,325,876	2,324,122
331.30	T & D Mains - Mains (10" - 16")	3	7,207,113	2,487,895	2,085,018	1,137,282	619,812	678,189	72,071	126,845
331.35	T & D Mains - Mains (12" or More)	3	21,458,743	7,407,558	6,208,014	3,386,190	1,845,452	2,019,268	214,587	377,674
	T & D Mains - Mains (18" or Greater)	3	476,370	164,443	137,814	75,171	40,968	44,826	4,764	8,384
333.40	Services	11	15,581,806	12,216,136	1,855,793	52,978	213,471	1,558	1,241,870	-
334.10	Meters	10	6,928,829	4,930,555	1,593,631	99,082	299,325	6,236	-	-
334.45	Meter Installations	10	9,698,333	6,901,334	2,230,617	138,686	418,968	8,728	-	-
335.40	Hydrants	21	5,815,595	-	-	-	-	-	-	5,815,595
	General									
303.00	Land & Land Rights AG	14	25,022	14,127	5,905	1,541	1,506	776	355	811
304.50	Structures and Improvements - AG	14	654,887	369,749	154,553	40,341	39,424	20,301	9,299	21,218
304.60	Office Structures	14	470,854	265,844	111,121	29,005	28,345	14,596	6,686	15,256
304.70	Stores , Shop, & Garage Structures	14	21,563	12,175	5,089	1,328	1,298	668	306	699
304.80	Miscellaneous Structures	14	45,216	25,529	10,671	2,785	2,722	1,402	642	1,465
340.10	Office Furniture	14	114,956	64,904	27,130	7,081	6,920	3,564	1,632	3,725
340.20	Computer & Peripheral Equipment	14	295,883	167,055	69,828	18,226	17,812	9,172	4,202	9,587
340.21	Computer and Mainframe Equipment	14	(29,840)	(16,848)	(7,042)	(1,838)	(1,796)	(925)	(424)	(967)
340.22	Computer & Periph Personal	14	302,834	170,980	71,469	18,655	18,231	9,388	4,300	9,812
340.23	Computer & Periph Other	14	250,548	141,459	59,129	15,434	15,083	7,767	3,558	8,118
340.24	Computer and Periph Capital	14	20,679	11,675	4,880	1,274	1,245	641	294	670
340.30	Computer Software	14	136,510	77,074	32,216	8,409	8,218	4,232	1,938	4,423
340.31	Computer Software Mainframe	14	(352,567)	(199,060)	(83,206)	(21,718)	(21,225)	(10,930)	(5,006)	(11,423)
340.315	Computer Software	14	3,342,406	1,887,123	788,808	205,892	201,213	103,615	47,462	108,294
340.315	Computer Software	12	969,843	836,199	104,840	1,940	9,214	97	17,457	97
340.32	Computer Software Other	14	(19,617)	(11,076)	(4,630)	(1,208)	(1,181)	(608)	(279)	(636)
340.33	Computer Software Other	14	(1,514)	(855)	(357)	(93)	(91)	(47)	(22)	(49)
340.40	Data Handling Equipment	14	1,142	645	270	70	69	35	16	37
340.50	Other Office Equipment	14	15,961	9,011	3,767	983	961	495	227	517
341.10	Light Trucks	14	316,530	178,713	74,701	19,498	19,055	9,812	4,495	10,256
341.20	Heavy Trucks	14	713,966	403,105	168,496	43,980	42,981	22,133	10,138	23,132
341.30	Automobiles	14	181,096	102,247	42,739	11,155	10,902	5,614	2,572	5,868
341.40	Transportation-Other	14	299,350	169,013	70,647	18,440	18,021	9,280	4,251	9,699
342.00	Stores Equipment	14	(1,554)	(877)	(367)	(96)	(94)	(48)	(22)	(50)
343.00	Tools, Shop, & Garage Equipment	14	598,011	337,636	141,131	36,837	36,000	18,538	8,492	19,376

TENNESSEE-AMERICAN WATER COMPANY

ALLOCATION OF COST OF SERVICE TO CUSTOMER CLASSIFICATIONS
FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2013

Account Number	Account Description	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Other Public Authority	Other Water Utilities	Private Fire Protection	Public Fire Protection
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
344.00	Laboratory Equipment	2	21,983	7,769	6,509	3,550	1,937	2,115	37	66
345.00	Power Operated Equipment	14	(31,170)	(17,599)	(7,356)	(1,920)	(1,876)	(966)	(443)	(1,010)
346.10	Communication Equipment Non-Telephone	14	17,808	10,054	4,203	1,097	1,072	552	253	577
346.19	Communication Equip. Remote Control	14	140,610	79,387	33,184	8,662	8,465	4,359	1,997	4,556
346.20	Communication Equipment-Telephone	14	13,367	7,547	3,155	823	805	414	190	433
347.00	Miscellaneous Equipment	14	590,363	333,319	139,326	36,366	35,540	18,301	8,383	19,128
348.00	Other Tangible Plant	14	(513)	(290)	(121)	(32)	(31)	(16)	(7)	(17)
	Total Utility Plant in Service (Net)		169,444,307	77,544,043	47,822,471	11,607,828	13,359,763	5,340,075	3,664,927	10,105,193
	Other Rate Base Elements									
	Accumulated Deferred ITC	16	(20,965)	(9,598)	(5,916)	(1,436)	(1,652)	(660)	(453)	(1,250)
	Accumulated Amortization of Capital Lease	14	(1,576,226)	(889,937)	(371,989)	(97,096)	(94,889)	(48,863)	(22,382)	(51,070)
	CIAC and Advances - Mains	4	(13,711,356)	(5,871,203)	(4,934,717)	(459,330)	(1,468,486)	-	(355,124)	(622,496)
	CIAC and Advances- Services	11	(2,040,004)	(1,599,364)	(242,964)	(6,936)	(27,948)	(204)	(162,588)	-
	CIAC and Advances- Meters	10	(177,213)	(126,105)	(40,759)	(2,534)	(7,656)	(159)	-	-
	CIAC and Advances - Hydrants	21	(1,011,265)	-	-	-	-	-	-	(1,011,265)
	Deferred Taxes	16	(23,407,464)	(10,715,937)	(6,605,586)	(1,603,411)	(1,844,508)	(737,335)	(505,601)	(1,395,085)
	Utility Plant Acquisition Adjustment	16	(39,920)	(18,275)	(11,265)	(2,735)	(3,146)	(1,257)	(862)	(2,379)
	CWIP - Mains not classified	4	680,544	291,409	244,928	22,798	72,886	-	17,626	30,897
	CWIP - 6-10 Inch	4	93	40	33	3	10	-	2	4
	CWIP - Mains 12" and Greater	3	650,699	224,621	188,247	102,680	55,960	61,231	6,507	11,452
	CWIP - Pumping Structures	6	21,342	7,581	6,358	3,110	1,893	1,810	213	378
	CWIP - Tools, Shop and Garage Equip.	14	(1,832)	(1,034)	(432)	(113)	(110)	(57)	(26)	(59)
	CWIP - Comp. Planning Study -other P/E	16	1,135	520	320	78	89	36	25	68
	CWIP - Water treatment Structures	2	301,147	106,425	89,170	48,635	26,531	28,970	512	903
	CWIP - Distribution Reservoirs and Standpipe	5	51,747	17,594	14,753	7,581	4,388	4,331	1,123	1,977
	CWIP - Land and Land Rights - Pumping	6	12,805	4,548	3,815	1,866	1,136	1,086	128	227
	CWIP -Admin. & General Structures	14	115,385	65,146	27,231	7,108	6,946	3,577	1,638	3,738
	CWIP - Services	11	11,871	9,306	1,414	40	163	1	946	-
	CWIP - Pumping Equipment	6	19,634	6,973	5,849	2,861	1,742	1,665	196	348
	CWIP - Hydrants	21	10,427	-	-	-	-	-	-	10,427
	CWIP - Computer Software	14	1,706,675	963,589	402,775	105,131	102,742	52,907	24,235	55,296
	RWIP	16	-	-	-	-	-	-	-	-
	Deferred Maintenance	14	-	-	-	-	-	-	-	-
	Utility Plant Capital lease	14	1,590,500	897,996	375,358	97,975	95,748	49,306	22,585	51,532
	Limited Term Utility Plant - Net	16	-	-	-	-	-	-	-	-
	Working Capital Allowance	22	3,188,192	1,717,159	762,934	250,273	198,624	132,310	39,534	87,356
	Subtotal Other Rate Base Elements		(33,624,050)	(14,918,546)	(10,090,443)	(1,523,452)	(2,879,537)	(451,305)	(931,766)	(2,829,001)
	Total Original Cost Rate Base		135,820,256	62,625,497	37,732,028	10,084,376	10,480,226	4,888,770	2,733,161	7,276,192

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 18. ALLOCATION OF OTHER REVENUES.

Factors are based on the allocation of total cost of service.

Customer Classification	Total Cost of Service	Allocation Factor
(1)	(2)	(3)
Residential	$25,277,183	0.4970
Commercial	13,166,268	0.2589
Industrial	3,967,640	0.0780
Other Public Authority	3,552,562	0.0698
Other Water Utilities	2,029,330	0.0399
Private Fire Protection	793,814	0.0156
Public Fire Protection	2,074,012	0.0408
Total	$50,860,809	1.0000

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 19. ALLOCATION OF COSTS WHICH VARY WITH THE AMOUNT OF WATER CONSUMED IN THE LOOKOUT MOUNTAIN SERVICE AREA.

Factors are based on the pro forma test year average daily consumption for each customer classification.

Customer Classification	Average Daily Consumption, 100 Cu. Ft.	Allocation Factor
(1)	(2)	(3)
Residential	670	0.8171
Commercial	123	0.1500
Other Public Authority	27	0.0329
Total	820	1.0000

FACTOR 20. ALLOCATION OF COSTS WHICH VARY WITH THE AMOUNT OF WATER CONSUMED IN THE LAKEVIEW SERVICE AREA.

Factors are based on the pro forma test year average daily consumption for each customer classification.

Customer Classification	Average Daily Consumption, 100 Cu. Ft.	Allocation Factor
(1)	(2)	(3)
Residential	472	0.8725
Commercial	59	0.1091
Industrial	1	0.0018
Other Public Authority	9	0.0166
Total	541	1.0000

FACTOR 21. ALLOCATION OF COSTS ASSOCIATED WITH FIRE HYDRANTS.

These costs are assigned directly to the public fire protection classification.

Customer Classification	Allocation Factor
(1)	(3)
Public Fire Protection	1.0000

TENNESSEE-AMERICAN WATER COMPANY

FACTOR 22. ALLOCATION OF WORKING CAPITAL

Factors are based on the allocation of operation and maintenance expenses, excluding regulatory expense.

Customer Classification	Total Cost of Service	Allocation Factor
(1)	(2)	(3)
Residential	13,159,020	0.5386
Commercial	5,847,639	0.2393
Industrial	1,919,453	0.0785
Other Public Authority	1,523,453	0.0623
Other Water Utilities	1,014,089	0.0415
Private Fire Protection	303,685	0.0124
Public Fire Protection	669,938	0.0274
Total	24,437,277	1.0000

TENNESSEE-AMERICAN WATER COMPANY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 23. ALLOCATION OF UNCOLLECTIBLE ACCOUNTS

Factors are based on the net write-offs by customer class.

Customer Classification	Net Write-Offs	Allocation Factor
(1)	(2)	(3)
Residential	$391,068	0.9193
Commercial	34,327	0.0807
Industrial	0	0.0000
Other Public Authority	11	0.0000
Other Water Utilities	0	0.0000
Private Fire Protection	0	0.0000
Total	$425,407	1.0000

PART III. PROPOSED CUSTOMER RATES

Tennesee American Water

Present and Proposed Rates for General Water Service

		Chattanooga					
Service Charge		Residential	Commercial	Industrial	OPA	SFR	Proposed Rates
Monthly	5/8"	$12.54	$12.46	$13.09	$12.54	$12.54	$16.50
	3/4"	21.07	21.99	21.99	21.07	21.07	27.72
	1"	35.05	36.58	36.58	35.05	35.05	46.12
	1-1/2"	70.13	73.19	73.19	70.13	70.13	92.28
	2"	112.20	117.10	117.10	112.20	112.20	147.63
	3"	210.37	219.55	219.55	210.37	210.37	276.80
	4"	350.63	365.94	365.94	350.63	350.63	461.36
	6"	701.26	731.88	731.88	701.26	701.26	922.71
	8"	1,121.99	1,170.99	1,170.99	1,121.99	1,121.99	1,476.30
	10"						
	12"						
Consumption:	CCF Monthly	Residential	Commercial	Industrial	OPA	SFR No Contract	Proposed Rates
First	4	0.2330	0.2320	0.2430	0.2330	0.2330	0.3024
Next	61	3.6960	3.6730	3.8570	3.6960	3.6960	4.7974
Next	435	2.3220	2.3080	2.4240	2.3220	2.3220	2.7323
Next	4,500	1.7360	1.7250	1.7120	1.7360	1.7360	2.0832
Next	10,000	1.3270	1.3180	1.3080	1.3270	1.3270	1.6322
All Over	15,000	0.7880	0.7830	0.7780	0.7880	0.7880	0.9692
SFR Contract							
Ft. Oglethorpe - 1stBlock	Up to 45,000	1.0780					1.1500
Ft. Oglethorpe - 2nd Block	Over 45,000	1.0780					2.0000
Catoosa County	Up to 45,000	1.0780					1.1500
Catoosa County	Over 45,000	1.0780					2.0000
Signal Mountain	Up to 45,000	1.0344					1.1500
Signal Mountain	Over 45,000	1.0344					2.0000
Walden's Ridge	Up to 45,000	1.2180					1.1500
Walden's Ridge	Over 45,000	1.2180					2.0000

	All Areas	
Private Fire	Present	Proposed
1"	$32.66	$32.66
1-1/2"	73.67	73.67
2"	131.02	131.02
2-1/2"	199.79	199.79
3"	294.50	294.50
4"	589.75	589.75
6"	1,178.56	1,178.56
8"	2,359.11	2,359.11
10"	3,538.92	3,538.92
12"	4,718.96	4,718.96

Tennesee American Water

Present and Proposed Rates for General Water Service

		Lookout Mountain						Lakeview Mountain					
Service Charge		Residential	Commercial	Industrial	OPA	SFR	Proposed Rates	Residential	Commercial	Industrial	OPA	SFR	Proposed Rates
Monthly	5/8"	$14.07	$13.99	$14.07	$14.07	$14.07	$16.50	$14.07	$13.99	$14.07	$14.07	$14.07	$16.50
	3/4"	21.07	20.93	21.07	21.07	21.07	27.72	21.07	20.93	21.07	21.07	21.07	27.72
	1"	35.05	34.83	35.05	35.05	35.05	46.12	35.05	34.83	35.05	35.05	35.05	46.12
	1-1/2"	70.13	69.69	70.13	70.13	70.13	92.28	70.13	69.69	70.13	70.13	70.13	92.28
	2"	112.20	111.49	112.20	112.20	112.20	147.63	112.20	111.49	112.20	112.20	112.20	147.63
	3"	210.37	209.06	210.37	210.37	210.37	276.80	210.37	209.06	210.37	210.37	210.37	276.80
	4"	350.63	348.45	350.63	350.63	350.63	461.36	350.63	348.45	350.63	350.63	350.63	461.36
	6"	701.26	696.91	701.26	701.26	701.26	922.71	701.26	696.91	701.26	701.26	701.26	922.71
	8"	1,121.99	1,115.04	1,121.99	1,121.99	1,121.99	1,476.30	1,121.99	1,115.04	1,121.99	1,121.99	1,121.99	1,476.30
	10"												
	12"												
Consumpti	CCF Monthly	Residential	Commercial	Industrial	OPA	SFR	Proposed Rates	Residential	Commercial	Industrial	OPA	SFR	Proposed Rates
First	4	0.8680	0.8620	0.8680	0.8680	0.8680	1.2054	0.4290	0.4250	0.4290	0.4290	0.4290	1.2054
Next	61	4.7610	4.7310	4.7610	4.7610	4.7610	5.7004	4.0730	4.0480	4.0730	4.0730	4.0730	5.7004
Next	435	3.3870	3.3660	3.3870	3.3870	3.3870	3.6353	2.6990	2.6830	2.6990	2.6990	2.6990	3.6353
Next	4,500	2.3680	2.3530	2.3680	2.3680	2.3680	2.9862	1.9290	1.9180	1.9290	1.9290	1.9290	2.9862
Next	10,000	1.9600	1.9490	1.9600	1.9600	1.9600	2.5352	1.5210	1.5120	1.5210	1.5210	1.5210	2.5352
All Over	15,000	1.4210	1.4120	1.4210	1.4210	1.4210	1.8722	0.9820	0.9750	0.9820	0.9820	0.9820	1.8722

Tennesee American Water

Present and Proposed Rates for General Water Service

		Suck Creek						Lone Oak					
Service Charge		Residential	Commercial	Industrial	OPA	SFR	Proposed Rates	Residential	Commercial	Industrial	OPA	SFR	Proposed Rates
Monthly	5/8"	$27.49	$27.31	$27.49	$27.49	$27.49	$25.75	$37.76	$37.53	$37.76	$37.76	$37.76	$27.72
	3/4"	$27.49	$27.31	$27.49	$27.49	$27.49	27.72	$37.76	$37.53	$37.76	$37.76	$37.76	27.72
	1"	$27.49	$27.31	$27.49	$27.49	$27.49	46.12	$37.76	$37.53	$37.76	$37.76	$37.76	46.12
	1-1/2"	$27.49	$27.31	$27.49	$27.49	$27.49	92.28	$37.76	$37.53	$37.76	$37.76	$37.76	92.28
	2"	$27.49	$27.31	$27.49	$27.49	$27.49	147.63	$37.76	$37.53	$37.76	$37.76	$37.76	147.63
	3"	$27.49	$27.31	$27.49	$27.49	$27.49	276.80	$37.76	$37.53	$37.76	$37.76	$37.76	276.80
	4"	$27.49	$27.31	$27.49	$27.49	$27.49	461.36	$37.76	$37.53	$37.76	$37.76	$37.76	461.36
	6"	$27.49	$27.31	$27.49	$27.49	$27.49	922.71	$37.76	$37.53	$37.76	$37.76	$37.76	922.71
	8"	$27.49	$27.31	$27.49	$27.49	$27.49	1,476.30	$37.76	$37.53	$37.76	$37.76	$37.76	1,476.30
	10"												
	12"												
Consumpti	CCF Monthly	Residential	Commercial	Industrial	OPA	SFR	Proposed Rates	Residential	Commercial	Industrial	OPA	SFR	Proposed Rates
First	4	0.0000 *	0.0000 *	0.0000 *	0.0000 *	0.0000	1.2054	0.0000 **	0.0000 **	0.0000 **	0.0000 **	0.0000 **	1.2054
Next	61	3.9690 *	3.9450 *	3.9690 *	3.9690 *	3.9690	5.7004	4.7483 **	4.7183 **	4.7483 **	4.7483 **	4.7483 **	5.7004
Next	435	2.9770 *	2.9580 *	2.9770 *	2.9770 *	2.9770	3.6353						3.6353
Next	4,500						2.9862						2.9862
Next	10,000						2.5352						2.5352
All Over	15,000						1.8722						1.8722

* Current rates blocks for Suck Creek are first 2 CCF, next 10.667 CCF and over 12.667 CCF

** Current rates blocks for Lone Oak are first 2.67 CCF, over 2.67 CCF