

IN THE TENNESSEE PUBLIC UTILITY COMMISSION
AT NASHVILLE, TENNESSEE

IN RE:)	
)	
APPLICATION OF TENNESSEE)	
WATER SERVICE, INC. FOR)	
ADJUSTMENT OF RATES AND)	DOCKET NO. 19-00028
CHARGES, APPROVAL OF A)	
QUALIFIED INFRASTRUCTURE)	
INVESTMENT PROGRAM, AND)	
MODIFICATION TO CERTAIN)	
TERMS AND CONDITIONS FOR THE)	
PROVISION OF WATER SERVICE)	

DIRECT TESTIMONY

OF

WILLIAM H. NOVAK

July 12, 2019

**IN THE TENNESSEE PUBLIC UTILITY COMMISSION
AT NASHVILLE, TENNESSEE**

IN RE:

**APPLICATION OF TENNESSEE
WATER SERVICE, INC. FOR
ADJUSTMENT OF RATES AND
CHARGES, APPROVAL OF A
QUALIFIED INFRASTRUCTURE
INVESTMENT PROGRAM, AND
MODIFICATION TO CERTAIN
TERMS AND CONDITIONS FOR THE
PROVISION OF WATER SERVICE**

DOCKET NO. 19-00028

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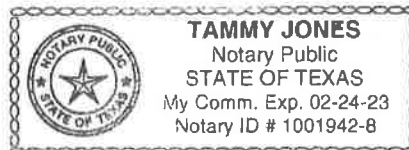
I, William H. Novak on behalf of the Consumer Advocate Unit of the Attorney General's Office, hereby certify that the attached Direct Testimony represents my opinion in the above-referenced case and the opinion of the Consumer Advocate Unit.


WILLIAM H. NOVAK

Sworn to and subscribed before me
this 14 day of July, 2019.



NOTARY PUBLIC



My commission expires: 2-24-23

**BEFORE
THE TENNESSEE PUBLIC UTILITY COMMISSION
AT NASHVILLE**

Application of Tennessee Water Service,)	
Inc. for Adjustment of Rates and Charges,)	
Approval of a Qualified Infrastructure)	
Investment Program, and Modification to)	Docket No. 19-00028
Certain Terms and Conditions for the)	
Provision of Water Service)	
)	

**DIRECT TESTIMONY
of
WILLIAM H. NOVAK**

**ON BEHALF OF

THE CONSUMER ADVOCATE UNIT
OF THE
FINANCIAL DIVISION
OF THE
OFFICE OF THE TENNESSEE ATTORNEY GENERAL**

July 12, 2019

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ATTACHMENTS

Attachment WHN-1	William H. Novak Vitae
Attachment WHN-2	Consumer Advocate Exhibit
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Attachment WHN-4	Cumulative Impact of Tariff Error
Attachment WHN-5	Consumer Advocate Proposed Rate Design

1 ***Q1. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND***
2 ***OCCUPATION FOR THE RECORD.***

3 A1. My name is William H. Novak. My business address is 19 Morning Arbor Place,
4 The Woodlands, TX, 77381. I am the President of WHN Consulting, a utility
5 consulting and expert witness services company.¹
6

7 ***Q2. PLEASE PROVIDE A SUMMARY OF YOUR BACKGROUND AND***
8 ***PROFESSIONAL EXPERIENCE.***

9 A2. A detailed description of my educational and professional background is provided
10 in Attachment WHN-1 to my testimony. Briefly, I have both a Bachelor's degree
11 in Business Administration with a major in Accounting, and a Master's degree in
12 Business Administration from Middle Tennessee State University. I am a
13 Certified Management Accountant and am also licensed to practice as a Certified
14 Public Accountant.
15

16 My work experience has centered on regulated utilities for over 35 years. Before
17 establishing WHN Consulting, I was Chief of the Energy & Water Division of the
18 Tennessee Public Utility Commission (the Commission) where I had either
19 presented testimony or advised the Commission on a host of regulatory issues for
20 over 19 years. In addition, I was previously the Director of Rates & Regulatory
21 Analysis for two years with Atlanta Gas Light Company, a natural gas
22 distribution utility with operations in Georgia and Tennessee. I also served for

¹ State of Tennessee, Registered Accounting Firm ID 3682.

1 two years as the Vice President of Regulatory Compliance for Sequent Energy
2 Management, a natural gas trading and optimization entity in Texas, where I was
3 responsible for ensuring the firm's compliance with state and federal regulatory
4 requirements.

5
6 In 2004, I established WHN Consulting as a utility consulting and expert witness
7 services company. Since 2004, WHN Consulting has provided testimony or
8 consulting services to state public utility commissions and state consumer
9 advocates in at least ten state jurisdictions as shown in Attachment WHN-1.

10
11 ***Q3. ON WHOSE BEHALF ARE YOU TESTIFYING?***

12 A3. I am testifying on behalf of the Consumer Advocate Unit (Consumer Advocate)
13 of the Financial Division of the Office of the Tennessee Attorney General.

14
15 ***Q4. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS***
16 ***PROCEEDING?***

17 A4. My testimony will support and address the Consumer Advocate's concerns,
18 positions and recommendations with respect to the Petition filed by Tennessee
19 Water Service (TWS or Company) to increase its rates and charges. Specifically,
20 I will address the following:

- 21 1. The Consumer Advocate's proposed attrition period revenue and expense
22 calculations;
- 23 2. The Consumer Advocate's proposed attrition period rate base calculations;

3. The Consumer Advocate's calculations for the Company's proposed recovery of its deferred operating losses allowed by the Commission in Docket No. 17-00108;
4. The Consumer Advocate's calculations for the Company's proposed recovery of its deferred return on incremental plant investment allowed by the Commission in Docket No. 17-00108;
5. The Consumer Advocate's calculations for the Company's proposed recovery of its deferred rate case costs;
6. The Consumer Advocate's proposal for the establishment of a regulatory liability related to the Company's uninsured property losses from fire damage;
7. The Consumer Advocate's non-objection to the Company's proposed cost of capital;
8. The Consumer Advocate's proposed revenue conversion factor;
9. The Consumer Advocate's proposed treatment of the Operational Costs Pass-Through Mechanism contained in the Company's tariff; and
10. The Consumer Advocate's proposed rate design and tariff changes.

Q5. WHAT DOCUMENTS HAVE YOU REVIEWED IN PREPARATION OF YOUR TESTIMONY?

A5. I have reviewed the Company's Petition filed on February 28, 2019, along with the testimony and exhibits presented with its filing. I also reviewed the

1 Company's Amended Petitions filed on March 22, 2019 and May 30, 2019.² In
2 addition, I have reviewed the Company's workpapers supporting its attrition
3 period revenues and rate base. I have also reviewed the Company's responses to
4 the Consumer Advocate's discovery requests. In addition, I reviewed the
5 Commission's Order in Docket No. 17-00108, and other dockets cited in that
6 Order, regarding the establishment of interim rates needed to address the
7 Company's property losses from fire damage.

8
9 ***Q6. PLEASE SUMMARIZE YOUR RECOMMENDATIONS AND CONCERNS***
10 ***IN THIS DOCKET.***

11 A6. I recommend approval of an increase in base rates and changes to the current
12 tariffs for TWS subject to the following adjustments and restrictions.

- 13 • I recommend that the Company be granted a rate increase of \$73,087 as
14 detailed on the Consumer Advocate Exhibit, Schedule 1 and summarized on
15 Table 2 of my testimony that reflects the Rate Base, Income, Cost of Capital
16 and Revenue Conversion Factor described in Parts I, II, III, IV, V, VI, VII and
17 VIII of my testimony.
- 18 • I recommend that the Company be allowed to continue deferring its operating
19 losses from October 2018 through December 2019 for later recovery in
20 conformance with the Commission's Order in Docket No. 17-00108 as
21 described in Part III of my testimony. Further, I recommend that the

² These Amended Petitions were filed by TWS in order to remove its prior request for approval of a Qualified Infrastructure Investment Program under Tennessee's alternative regulation statute.

1 Company be prohibited from retroactively charging their customers for errors
2 from the incorrect application of tariff rates.

- 3 • I recommend that the Commission direct the Company to establish a
4 regulatory liability on its books for \$757,006 with an annual amortization of
5 \$11,619 to reflect the imprudent business decisions of the Company that
6 allowed certain assets used to provide water service to remain uninsured for
7 their replacement costs as described in Part VI of my testimony.
- 8 • I recommend that the tariff provisions related to the Interim Emergency
9 Operational Costs Pass-Through Mechanism (IEOCPTM) be terminated as
10 described in Part IX of my testimony.
- 11 • I recommend that Commission increase the current base charge and usage
12 charges of the Company's tariff by 29.93% as described in Part X of my
13 testimony.

14

15 ***Q7. MR. NOVAK, PLEASE DESCRIBE THE RELIEF THAT TWS IS ASKING***
16 ***FROM THE COMMISSION IN ITS PETITION.***

17 A7. The Company is asking the Commission to allow it to increase its rates by
18 approximately \$300,000, with that increase to be phased-in over a three-year
19 period.³ According to the Company, this represents an increase of 177% to
20 residential customers.⁴ To my knowledge, this change represents the largest per-
21 customer residential rate increase ever requested from the Commission.⁵

³ Attachment WHN-2, Schedule 1.

⁴ Direct testimony of TWS witness Heigel, Page 6.

⁵ To emphasize the gravity of this increase, I also note – though I do not address further in my testimony – that there are other issues that may be worthy of Commission analysis and consideration concerning the

1 In addition, the Company is asking the Commission to allow it to defer its 2019
2 operating losses for rate recovery at a later time.⁶ The Company is also proposing
3 certain changes to its existing tariff to establish a separate charge for private fire
4 service. Finally, the Company is proposing to alter the existing tariff language for
5 the Operational Costs Pass-Through Mechanism.

6
7 ***Q8. WHAT TEST PERIOD AND ATTRITION PERIOD HAVE YOU***
8 ***ADOPTED FOR THIS CASE?***

9 A8. The Company has proposed the twelve months ended September 30, 2018 as its
10 test period with attrition adjustments through the twelve months ending December
11 31, 2020, and I have adopted these same review periods for the Consumer
12 Advocate's proposed test period and attrition period. However, while I have
13 adopted the historical financial results for the twelve months ended September 30,
14 2018 as the test period, I have used the monthly data for the three-year period
15 ended September 30, 2016 for calculating the Company's going-level expenses
16 per customer. This three-year review was necessary in order to properly consider
17 the anomalies during the test period arising from the significant loss of customers
18 due to the fire damage of November 2016.

19

potential that an individual (or groups of) customers, in the face of rates like those proposed by the Company, would bypass the utility by drilling their own water wells, using water-collecting cisterns, or tanking in water from other providers. If rates remained high – and customers bypassed in some fashion – then rates would continue to increase in a circular manner and the utility could face the possibility of a death spiral that could eventually result in some form of a receivership. As its responses to the Consumer Advocate show, the Company has not done sufficient analysis on this and it is beyond the scope of my current testimony. Along these lines, note the Company's response to Consumer Advocate Discovery Request 5-3.

⁶ Direct testimony of Company witness DeStefano, Page 8, Lines 11 – 14.

To help illustrate this methodology, my calculation for Purchased Power Expense is shown below in Table 1.

Table 1 – Purchased Power Expense⁷	
Period	Expense/Customer
Twelve Months Ended September 30, 2014	\$24.94
Twelve Months Ended September 30, 2015	\$28.23
Twelve Months Ended September 30, 2016	\$24.54
Twelve Months Ended September 30, 2017	\$93.83
Twelve Months Ended September 30, 2018	\$17.61
Average for 2014 – 2016	\$25.90
Projected Attrition Period Customers	311
Pre-Fire Average Expense	\$8,056
Compound Inflation Factor	1.0585 ⁸
Attrition Period Expense	\$8,527

As can be seen from Table 1, I have taken the “pre-fire” average expense per customer from 2014 through 2016 of \$25.90 and then multiplied this amount by the projected number of customers (311) and a compound inflation rate (5.85%) to arrive at the attrition period expense of \$8,527 for Purchased Power. By using the “pre-fire” average expense for 2014 through 2016, I have avoided the test period variance in expense from the significant swing in the number of customers that was caused by the fire. Except where otherwise noted, this same test period methodology change was applied to the calculation for each of the Company’s operating expenses.

⁷ WHN Expense Workpaper E-10-1.01.

⁸ Both the Company and I have used the same inflation forecast of 3.30%. However, the Company has compounded this inflation factor from the middle of the test period to the middle of the attrition period (27 months) producing a compound inflation rate of 1.0758 while I have compounded the inflation rate from the end of the test period to the middle of the attrition period (21 months) producing a compound inflation rate of 1.0585. Please refer to WHN Expense Workpaper E-20-9.02 for the details of these calculations.

1 ***Q9. HOW ARE CHARGES RECORDED ON THE BOOKS AND RECORDS***
2 ***OF TWS?***

3 A9. The local charges such as purchased water and purchased power are recorded
4 directly on the books of TWS. However, the general and administrative charges
5 such as billing costs and bank service charges are first recorded on the books of
6 Utilities Inc., (UI) and then allocated to TWS. UI currently has over 16
7 subsidiary operating companies – including TWS – which provide water and
8 sewer utility service to approximately 197,732 customers in 17 states.⁹ The costs
9 that UI allocates to TWS are generally based on the total customers served in all
10 jurisdictions of which TWS represented approximately 0.06% for 2018.¹⁰

11
12 ***Q10. WHAT IS YOUR RECOMMENDATION FOR THE REVENUE***
13 ***DEFICIENCY CALCULATION FOR THIS CASE?***

14 A10. As shown on Attachment WHN-2 which contains the Consumer Advocate Exhibit
15 and is summarized below on Table 2, my recommendation for the revenue
16 deficiency required to produce the 7.77% overall return (as proposed by the
17 Company and to which the Consumer Advocate does not object) is a revenue
18 increase of approximately \$73,000.

19
20
21

⁹ Direct testimony of Company witness Heigel, Page 10, Lines 1 – 3.

¹⁰ Company response to Consumer Advocate Discovery Request 4-1.

Table 2 – Revenue Deficiency Calculation ¹¹			
	TWS Initial	TWS Amended	Consumer Advocate
Rate Base	\$1,196,687	\$1,351,123	\$1,041,942
Operating Income	-129,877	-131,838	26,296
Earned Rate of Return	-10.85%	-9.76%	2.52%
Fair Rate of Return	7.77%	7.77%	7.77%
Required NOI	92,983	104,982	80,960
NOI Deficiency	222,860	236,820	54,664
Revenue Factor	1.359599	1.359599	1.337030
Revenue Deficiency	\$300,444	\$318,191	\$73,087

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[Testimony continues on next page]

¹¹ Consumer Advocate Exhibit, Schedule 1.

1 I. ATTRITION PERIOD OPERATING INCOME

2
3 ***Q11. MR. NOVAK, HAVE YOU PROVIDED THE COMMISSION WITH A***
4 ***CALCULATION OF THE UTILITY OPERATING INCOME FOR THE***
5 ***ATTRITION PERIOD?***

6 A11. Yes. A comparison of the utility operating income forecasts by the Company and
7 the Consumer Advocate is shown on Schedule 6 of the Consumer Advocate
8 Exhibit and is also presented below on Table 3. As shown on Table 3, the
9 Consumer Advocate's forecast of Utility Operating Income for the attrition period
10 is \$26,296 while the Company projected Utility Operating Loss for the attrition
11 period of \$-129,877 and \$-131,838 respectively in their initial and revised filings.
12

Table 3 – Utility Operating Income Calculation¹²			
	TWS Initial	TWS Amended	Consumer Advocate
Operating Revenues:			
Water Sales	\$169,323	\$170,412	\$244,156
Other	0	0	4,919
Total Revenues	\$169,323	\$170,412	\$249,075
O&M Expenses:			
Maintenance Expense	\$67,433	\$66,920	\$35,745
General Expense	19,114	19,711	17,473
Other O&M Expense	138,286	138,294	88,534
Total O&M Expenses	\$224,833	\$224,925	\$141,752
Other Expenses:			
Depreciation	\$37,669	\$39,613	\$42,735
Amort. of CIAOC	-15,119	-15,119	-15,213
Amort. of Excess Def Taxes	-2,719	-2,719	-2,769
Amort. of Investment Tax Credit	-48	-48	-48
Amort. of Operating Losses	49,061	49,730	20,894
Amort. of Deferred Return	16,239	17,297	8,649
Amort. of Deferred Rate Case	21,691	21,691	17,940
Amort. of Regulatory Liability	0	0	-11,619
General Taxes	18,874	18,874	20,444
State Excise Taxes	-12,754	-12,931	3
Federal Income Taxes	-38,527	-39,063	10
Total Other Expenses	\$74,367	\$77,325	\$81,027
Total Expenses	\$299,200	\$302,250	\$222,779
Utility Operating Income	\$-129,877	\$-131,838	\$26,296

***Q12. MR. NOVAK, PLEASE DESCRIBE THE MAJOR AREAS OF
DIFFERENCE BETWEEN THE COMPANY'S AND YOUR
CALCULATION OF ATTRITION PERIOD REVENUES.***

A12. As shown above on Table 3, I have forecasted approximately \$244,000 in attrition period sales revenues while the Company has projected approximately \$170,000

¹² Consumer Advocate Exhibit, Schedule 6.

1 for a difference of \$74,000. The major area of difference in our different revenue
2 forecasts appears to be due to the Company improperly applying their existing
3 tariff rates. Specifically, as shown on Attachment WHN-3, the Company's
4 current tariff provides for \$25.70 monthly charge for the first 1,000 gallons.
5 However, the Company has prepared their revenue forecast by implementing the
6 \$25.70 monthly charge for the first 2,000 gallons.¹³ This incorrect
7 implementation of the Company's tariff produced a revenue shortfall of
8 approximately \$50,000.¹⁴ Unfortunately, this error in applying the correct tariff
9 rate is not just limited to the rate case but was actually implemented into the
10 Company's billing system. As a result, the Company was actually under-
11 collecting \$6.30 per customer each month since the implementation of the
12 emergency rate order in Docket No. 17-00108.¹⁵ This under collection of revenue
13 resulting in a larger than anticipated operating loss for 2017 and 2018 which the
14 Company has deferred in accordance with the Commission's order in Docket No.
15 17-00108.¹⁶

16
17 The remaining differences in our sales revenue projections (approximately
18 \$24,000) are due to different forecasting methodologies. Specifically, I based the
19 usage forecast on the historical average water deliveries from 2014 through 2016
20 while the Company used only the test period deliveries to forecast water

¹³ See Company Petition, Page 3, Paragraph 6.

¹⁴ Tariff usage rate of \$13.30 * attrition period customers of 311 * 12 months.

¹⁵ The Commission Order allowed the Company to implement a \$7.00 increase to the monthly customer charge. However, when this \$7.00 increase is netted with the \$13.30 undercharge, the Company actually reduced its net monthly billing rate by \$6.30.

¹⁶ I speak further to the forecast of this deferred operating loss later in my testimony.

consumption. As described earlier, adjusting the test period for a normalized level of usage from 2014 through 2016 is appropriate in this case to properly consider any aberrations caused by fire damage.

The Other Revenue of \$4,919 included in Table 3 represents the forfeited discounts and other service revenues charged by the Company. TWS chose to exclude these revenues from their forecast.

Q13. PLEASE DESCRIBE THE MAJOR AREAS OF DIFFERENCE BETWEEN THE COMPANY'S AND YOUR CALCULATION OF ATTRITION PERIOD MAINTENANCE EXPENSE.

A13. As shown on Table 3, I have forecast approximately \$36,000 in attrition period Maintenance Expense while the Company has projected approximately \$67,000 for a difference of \$31,000. The components of Maintenance Expense can be broken down into further detail as shown below on Table 4.

Table 4 – Maintenance Expense¹⁷			
	TWS Initial	TWS Amended	Consumer Advocate
Purchased Power	\$8,667	\$8,723	\$8,527
Maintenance & Repair	50,173	50,190	23,240
Maintenance Testing	1,908	1,920	1,876
Chemicals	241	243	111
Transportation	2	2	5
Outside Services	6,442	5,842	1,986
Total	\$67,433	\$66,920	\$35,745

¹⁷ Consumer Advocate Exhibit, Schedule 7.

1 As shown on Table 4, the largest differences in the projections of Maintenance
2 Expense are due to different forecasts for Maintenance & Repair and Outside
3 Services.

4
5 One component of Maintenance & Repair Expense relates to charges for Outside
6 Contractors (Account No. 6370). The pre-fire normalized average for this
7 account was \$20,558 while the test period amount was \$47,444 for a difference of
8 approximately \$27,000 which accounts for nearly all of the difference in the
9 forecasts for this category.¹⁸ The Company chose to adopt the test period amount
10 of \$47,444 as the appropriate attrition period balance for Outside Contractors
11 while I adopted the pre-fire average amount of \$20,558 in keeping with the goal
12 of developing a normalized going-level. As a result, I recommend that the
13 Commission adopt the pre-fire normalized expense of \$20,558 as the appropriate
14 level of Maintenance & Repair Expense for the attrition period.

15
16 For Outside Services Expense, the Company included a pro forma adjustment of
17 \$4,401 from its budget for management fees and then added this amount to the
18 pre-fire normalized average.¹⁹ As with other expenses, I have only included the
19 pre-fire normalized expense of \$1,986 and recommend that the Commission adopt
20 this amount as the appropriate level of Outside Services Expense for the attrition
21 period.

22
¹⁸ See WHN Expense Workpaper E-10-2.08.

¹⁹ See Company Filing, Schedule G O&M Pro Forma.

***Q14. PLEASE DESCRIBE THE MAJOR AREAS OF DIFFERENCE BETWEEN
THE COMPANY'S AND YOUR CALCULATION OF ATTRITION
PERIOD GENERAL EXPENSE.***

A14. As shown on Table 3, I have forecast approximately \$17,500 in attrition period General Expense while the Company has projected approximately \$19,700 for a difference of \$2,200. The components of General Expense can be broken down into further detail as shown below on Table 5.

Table 5 – General Expense²⁰			
	TWS Initial	TWS Amended	Consumer Advocate
Office Expenses	\$2,935	\$2,954	\$2,882
Pensions & Benefits	6,880	6,924	6,769
Rent	2,034	2,047	1,492
Insurance	3,379	3,401	3,324
Office Utilities	2,370	2,386	1,575
Miscellaneous	1,516	1,999	1,431
Total	\$19,114	\$19,711	\$17,473

As shown on Table 5, the largest differences in the projections of General Expense are due to different forecasts for Rent and Office Utilities.

For Rent Expense, the Company included a pro forma adjustment of \$517 from its 2020 budget for management fees and then added this amount to the pre-fire normalized average.²¹ As with other expenses, I have only included the pre-fire normalized expense of \$1,492 and recommend that the Commission adopt this

²⁰ Consumer Advocate Exhibit, Schedule 7.

²¹ See Company Filing, Schedule G O&M Pro Forma.

1 amount as the appropriate level of Outside Services Expense for the attrition
2 period.

3
4 For Office Utilities, the difference in forecasts is related to a subcomponent for
5 Landscaping Expense. The pre-fire normalized average for Landscaping Expense
6 was approximately \$773.²² However, during the test period, this expense was
7 significantly reduced to \$17 and this appears to be the new going-level amount. I
8 therefore accepted the \$17 test period amount of Landscaping Expense as
9 representative for the attrition period while the Company used the pre-fire average
10 amount.

11
12 ***Q15. PLEASE DESCRIBE THE MAJOR AREAS OF DIFFERENCE BETWEEN***
13 ***THE COMPANY'S AND YOUR CALCULATIONS OF OTHER O&M***
14 ***EXPENSE IN THE ATTRITION PERIOD.***

15 A15. As shown on Table 3, I have forecast approximately \$89,000 in attrition period
16 Other O&M Expense while the Company has projected approximately \$138,000
17 for a difference of \$49,000. The components of Other O&M Expense can be
18 broken down into further detail as shown below on Table 6.

19
20
21

²² See WHN Expense Workpaper E-20-5.06.

Table 6 – Other O&M Expense ²³			
	TWS Initial	TWS Amended	Consumer Advocate
Purchased Water	\$116,937	\$116,937	\$60,295
Bad Debt	1,179	1,187	600
Regulatory	0	0	0
Salary & Wages	20,170	20,170	27,639
Total	\$138,286	\$138,294	\$88,534

As shown on Table 6, the largest differences in the projection of Other O&M Expense are due to different forecasts for Purchased Water Expense and Salary & Wages Expense.

The Company has overstated its Purchased Water Expense by basing its attrition period cost on test period deliveries instead of using the pre-fire normalized amount. As shown below, TWS has actually projected an amount of Purchased Water Expense for 311 customers that is greater than the historical amounts when there were 565 customers as shown in Table 7 below.

By way of background, TWS provides water to its customers through pumping and treatment of ground water from two public water supply wells in addition to an interconnection with the municipal system of the City of Gatlinburg.²⁴ Further, the Company noted the following in their testimony:

Currently purchased water from the City of Gatlinburg is the primary supply for Chalet Village customers with limited supplement from two wells as their facilities undergo pump station replacement as described above. As the capital projects are completed it is the intention of TWS that primary water supply will

²³ Consumer Advocate Exhibit, Schedule 7.

²⁴ Testimony of Company witness Mendenhall, Page 3, Lines 5 – 9.

1 *convert to the production wells with the municipal source serving as*
2 *a supplement as needed.*²⁵
3

4 The rehabilitation of the Company's wells was completed in May 2019 which
5 should now allow the Company to reduce its need for the more expensive water
6 supply from the City of Gatlinburg.²⁶ Unfortunately, the Company's Purchased
7 Water Expense forecast of \$116,937 was based on water deliveries during the test
8 period instead of the pre-fire normalized amount.²⁷ To illustrate further, TWS has
9 actually projected an amount of Purchased Water Expense for 311 customers that
10 is greater than the historical amounts for as many as 565 customers as shown
11 below on Table 7.

Table 7 – Purchased Water Expense²⁸		
Description	Purchased Water Expense	Average Bills
12 Months Ended 9-30-14	\$99,796	563
12 Months Ended 9-30-15	105,358	564
12 Months Ended 9-30-16	104,848	565
TWS Projection	\$116,937	311
WHN Projection	60,295	311

12
13 Since TWS is now able to resume using its water supply wells, I based my
14 forecast on the pre-fire normalized expense of \$60,295.²⁹ The pre-fire normalized
15 expense should now match the Company's current operations, and I would

²⁵ Testimony of Company witness Mendenhall, Page 7, Lines 1 – 5.

²⁶ Company response to Consumer Advocate Discovery Requests Nos. 3-12 and 5-10.

²⁷ Testimony of Company witness Gray, Page 4, Lines 20 – 22. In other words, the pre-fire normalized amount is a more appropriate basis for forecasting because of the non-recurring water purchases resulting from the extraordinary circumstances surrounding the fires that resulted in the Company's emergency petition and this general rate case. In this case, the use of non-normalized test period amounts by the Company has resulted in an inflated purchased water forecast.

²⁸ WHN Expense Workpaper E-30-1.04.

²⁹ WHN Expense Workpaper E-30-1.01.

1 recommend that the Commission adopt \$60,295 as the appropriate level of
2 Purchased Water Expense for the attrition period.

3
4 For Salary & Wages, the Company based its forecast on a price-out of anticipated
5 employees at expected pay rates to produce approximately \$20,170 in attrition
6 period expense.³⁰ Consistent with the methodology discussed previously, I have
7 based the Salary & Wages Expense on the Pre-Fire normalized level to produce
8 approximately \$27,639 in attrition period expense.³¹ In order to remain consistent
9 with the methodology used in my other forecasts, I would urge the Commission to
10 adopt \$27,639 as the appropriate level of Salary & Wages Expense.³²

11
12 ***Q16. PLEASE DESCRIBE THE MAJOR AREAS OF DIFFERENCE BETWEEN***
13 ***THE COMPANY'S AND YOUR CALCULATION OF DEPRECIATION***
14 ***AND AMORTIZATION EXPENSES.***

15 A16. Depreciation and Amortization Expenses are forecasted from the individual
16 components of Rate Base. I will therefore discuss these items later in my
17 testimony.

18

³⁰ Testimony of Company witness Gray, Page 4, Lines 10 – 19.

³¹ WHN Expense Workpaper E-30-4.00.

³² It appears that the Company has decreased the use of direct employees while increasing the use of outside contractors (Account No. 6370). Applying the same forecasting methodology to both accounts produces an appropriate going-level amount for the attrition period.

1 ***Q17. PLEASE DESCRIBE THE MAJOR AREAS OF DIFFERENCE BETWEEN***
2 ***THE COMPANY'S AND YOUR CALCULATION OF GENERAL TAX***
3 ***EXPENSES.***

4 A17. As shown on Table 3, I have forecast approximately \$20,000 in attrition period
5 General Tax Expense while the Company has projected approximately \$19,000
6 for a difference of \$1,000. The components of General Tax Expense can be
7 broken down into further detail as shown below on Table 8.

8

Table 8 – General Tax Expense³³			
	TWS Initial	TWS Amended	Consumer Advocate
Payroll Taxes	\$1,940	\$1,940	\$723
Franchise Taxes	1,792	1,792	1,122
Gross Receipts Taxes	3	3	144
Property Taxes	15,139	15,139	18,188
Utility Commission Fee	0	0	267
Total	\$18,874	\$18,874	\$20,444

As shown on Table 8, the total differences in General Tax Expense are relatively minor and driven by the different forecasting methodologies used by the Company and myself.

Q18. PLEASE DESCRIBE THE MAJOR AREAS OF DIFFERENCE BETWEEN THE COMPANY'S AND YOUR CALCULATION OF STATE EXCISE TAXES AND FEDERAL INCOME TAXES.

A18. State Excise Taxes and Federal Income Taxes are based on the respective statutory tax rates. The calculation for these income taxes is shown on Consumer Advocate Exhibit, Schedule 9 and is based on the individual forecasts of revenues and expenses discussed previously. As a result, there are no differences in the between the methodologies used by the Company and myself for forecasting the State Excise Tax and Federal Income Tax calculations. Instead the differences are related to the different forecasts for revenues and expenses previously mentioned.

³³ Consumer Advocate Exhibit, Schedule 8.

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A19. Rate Base represents the net investment in utility plant upon which the Company should be allowed the opportunity to earn a fair rate of return. A comparison of the Rate Base forecasts by the Company and the Consumer Advocate is shown on Schedule 3 of the Consumer Advocate Exhibit and is also presented below on Table 9. As shown on Table 9, the Consumer Advocate's forecast of Rate Base for the attrition period is \$1,041,942 while the Company projected Rate Base for the attrition period of \$1,196,687 and \$1,351,123 respectively in their initial and revised filings.

Table 9 – Rate Base Calculation ³⁴			
	TWS Initial	TWS Amended	Consumer Advocate
Additions:			
Utility Plant in Service	\$2,468,663	\$2,598,494	\$2,624,827
Working Capital	32,408	34,994	12,612
Deferred Operating Losses	0	0	198,494
Deferred Return	0	0	82,162
Deferred Rate Case Costs	0	0	80,730
Total Additions	\$2,501,071	\$2,633,488	\$2,998,825
Deductions:			
Accumulated Depreciation	\$513,922	\$513,922	\$436,926
Contributions in Aid of Const.	633,347	633,347	633,347
Accumulated Deferred Taxes	59,444	60,147	57,687
Reg. Liab. – Excess Def. Taxes	97,671	74,949	71,917
Reg. Liab. – Uninsured Prop.	0	0	757,006
Total Deductions	\$1,304,384	\$1,282,365	\$1,956,883
Rate Base	\$1,196,687	\$1,351,123	\$1,041,942

Utility Plant in Service. Utility Plant in Service is the largest component of rate base and represents the average amount of utility assets for the attrition year upon which the Company should be allowed the opportunity to earn a return. To calculate Utility Plant in Service, I began with the balance per books at the end of test period and then added the Company's projected plant additions and subtracted plant retirements through the mid-point of the attrition period as shown below on Table 10.

Table 10 – Attrition Year Plant in Service ³⁵	
Description	Amount
Plant in Service at 9-30-18	\$1,845,378
Plant Additions through Attrition Year Midpoint	870,530
Plant Retirement through Attrition Year Midpoint	-91,081
Plant in Service at Attrition Year Midpoint	\$2,624,827

³⁴ Consumer Advocate Exhibit, Schedule 3.

³⁵ WHN Rate Base Workpaper RB-10-1.00.

As shown on Table 10, I have accepted the Company's projection of \$870,530 in plant additions through the attrition year midpoint. These additions were incurred primarily to replace plant destroyed by fire and include the following items shown on Table 11.

Table 11 – Attrition Year Plant Additions ³⁶	
Description	Amount
Tank/Booster Station Rehabilitation	\$331,483
Well/Booster Station Rehabilitation	443,126
Replaced Service Lines	9,479
Replaced Meters & Meter Installations	36,442
Replaced SCADA Components	50,000
Total Plant Additions	\$870,530

The plant additions shown on Table 11 are a large component of the Company's need to increase rates. As must be noted, the previous plant that was destroyed by fire was contributed plant and therefore had no impact on rate base. However, the projected plant additions shown on Table 11 will substantially increase the Company's rate base and will ultimately increase the rates charged to customers.

Working Capital. This item represents the average amount of capital provided by TWS that is over and above the investment in plant and other specifically identified rate base items, to bridge the gap between the time expenditures are required to provide service and the time that collections are received for that service. My calculations for Working Capital are presented on Schedule 4 of the Consumer Advocate Exhibit.

³⁶ WHN Rate Base Workpaper RB-10-1.03.

1 **Deferred Assets.** The calculations for the Company's deferred assets (deferred
2 operating losses, deferred return and deferred rate case costs) are discussed as
3 separate items later in my testimony.

4
5 **Accumulated Depreciation.** This item represents the amount of depreciation
6 which has accrued over the life of the various capital assets included within
7 Utility Plant in Service as described above. Most of the Company's plant in
8 service is depreciated at an annual 1.50% rate which then appears as depreciation
9 expense of \$42,735 on the income statement as shown on Table 3. The primary
10 difference in my Accumulated Depreciation forecast from the Company's
11 calculation is that TWS omitted the plant retirements of approximately \$91,000
12 shown on Table 10. Typically plant retirements reflect a reduction to plant in
13 service as well as a reduction to accumulated depreciation.

14
15 **Contributions in Aid of Construction.** This item represents non-investor
16 supplied funds that were dedicated to constructing the Company's original water
17 plant. Because these funds were not provided by the Company, it is appropriate
18 that they be deducted in computing Rate Base. The Company is amortizing
19 Contributions in Aid of Construction at the same 1.50% rate that is used to
20 depreciate utility plant, which then appears as Amortization of CIAOC of \$-
21 15,213 on the Income Statement as shown on Table 3. The unamortized balance
22 of this account at the midpoint of the attrition year for \$633,347 is then shown as
23 a deduction to Rate Base as shown on Table 9.

Accumulated Deferred Taxes. This item represents the net amount of income tax (federal and state) that the Company has deferred payment on primarily due to the use of accelerated depreciation. To calculate this item, I included the impact of accelerated depreciation on the Company's new plant additions mentioned earlier which produced a balance of \$57,687 at the midpoint of the attrition year as shown on Table 9.

Regulatory Liability – Excess Deferred Taxes. This item represents prior excess tax deferrals. These tax deferrals were originally accrued at the 35% federal corporate tax rate. When the federal corporate tax rate was reduced to 21% it resulted in an excess of deferrals that need to be properly amortized. There are protected and unprotected portions of these Excess Deferred Taxes as shown below on Table 12.

Table 12 – Attrition Year Excess Deferred Taxes ³⁷			
Type	Amount	Amortization Period	Annual Amortization
Protected	\$69,973	49	\$1,473
Unprotected	1,944	3	1,296
Total	\$71,917		\$2,769

The Company has amortized the protected portion of Excess Deferred Taxes over a 49-year period consistent with IRS normalization rules.³⁸ However, the Company has proposed to amortize the unprotected portion of Excess Deferred

³⁷ WHN Rate Base Workpaper RB-14-1.00.

³⁸ Company Filing, Schedule G as shown on WHN Rate Base Workpaper RB-14-1.03. However, note that Company witness DeStefano states on Page 9 of his direct testimony that the Company has amortized the protected portion of Excess Deferred Taxes over a 59-year period.

1 Taxes over a 5-year period.³⁹ I have instead used a 3-year period to amortize the
2 unprotected portion of Excess Deferred Taxes to recognize the Commission's
3 prior decision on this issue.⁴⁰ As a result, the unamortized balance in this account
4 of \$71,917 at the midpoint of the attrition year is reflected in the calculation of
5 Rate Base shown on Table 9 while the Amortization of Excess Deferred Taxes of
6 \$2,769 is shown in the Income Statement on Table 3.

7
8 **Regulatory Liability – Uninsured Property.** This item represents the regulatory
9 impact of the Company's imprudent and irresponsible decision not to carry
10 adequate insurance on its utility plant, and is discussed in more detail later in my
11 testimony.

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15 *[Testimony continues on next page]*

³⁹ Testimony of Company witness DeStefano, Page 9, Line 21 through Page 10, Line 3.

⁴⁰ Compliance Filing of Piedmont Natural Gas Company, Inc. regarding the Impact of Federal Tax Reform on Public Utility Revenue Requirements, Docket No. 18-00040.

1

3 Q20. MR. NOVAK, PLEASE EXPLAIN WHY TENNESSEE WATER SERVICE
4 IS PERMITTED TO DEFER THEIR OPERATING LOSSES.

8 Therefore, the panel voted unanimously that TWS should be authorized to create
9 regulatory asset accounts to defer the following:

- 16

A21. The Company prepared a monthly income statement for TWS running from January 2017 through December 2018 showing cumulative operating losses during this period of \$245,305.⁴² The Company then proposes to amortize this cumulative operating loss over a 5-year period resulting in \$49,061 of annual amortization as shown previously on Table 3.⁴³

24 **Q22. HOW DOES THE COMPANY PROPOSE TO TREAT ITS OPERATING**
25 **LOSSES FOR 2019?**

⁴³ Direct testimony of Company witness DeStefano, Page 7, Lines 16-18.

1 A22. The Company is proposing that its 2019 operating losses be deferred for later
2 recovery through a temporary surcharge outside of this rate case.⁴⁴
3

4 ***Q23. DO YOU AGREE WITH THE COMPANY'S DEFERRED OPERATING***
5 ***LOSS CALCULATION?***

6 A23. Not entirely. I do agree with the Company's calculation of the monthly operating
7 losses. However, I have only accumulated this monthly loss from its authorized
8 inception in January 2017 through to the end of the test period in this rate case or
9 September 2018.⁴⁵ The cumulative monthly operating loss through September
10 2018 is \$208,941.⁴⁶ I am also recommending that this operating loss be amortized
11 over a 10-year period of \$20,894 per year as shown previously on Table 3 in order
12 to recognize its unique and unusual nature. In addition, I have included the
13 unamortized balance of \$198,494 in operating losses within the Rate Base
14 calculation as shown on Table 9.⁴⁷ Finally, I would recommend that the
15 Company be allowed to continue deferring its operating losses from October 2018
16 through December 2019 for later recovery in conformance with the Commission's
17 Order in Docket No. 17-00108.
18

⁴⁴ Direct testimony of Company witness DeStefano, Page 8, Lines 11-14.

⁴⁵ From my perspective, accumulating the monthly loss through September 2018 would enable the cumulative losses through the rate case test period to be evaluated within the context of the rate case, and the remaining losses to be evaluated together in a later evaluation docket.

⁴⁶ WHN Rate Base Workpaper RB-16-1.00.

⁴⁷ It should be noted that the Company excluded the impact of unamortized deferred operating losses in the Rate Base calculation. Typically, the unamortized balance of authorized regulatory assets is reflected within Rate Base. The Company's testimony does not mention any reason for this omission.

1 ***Q24. HAVE YOU TAKEN INTO ACCOUNT THE COMPANY'S***
2 ***MISAPPLICATION OF THEIR TARIFF IN THE CALCULATION OF***
3 ***DEFERRED OPERATING LOSSES?***

4 A24. No. As mentioned earlier, the Company misapplied its new tariff charges
5 resulting from Docket No. 17-00108.⁴⁸ Specifically, the Company applied the
6 monthly customer charge to the first 2,000 gallons per month instead of the first
7 1,000 gallons per month as provided for in the tariff. As shown on Attachment
8 WHN-4, this tariff error increased the operating loss calculation by \$29,247 for
9 2018 and is estimated to increase operating losses by another \$39,461 for 2019 if
10 it is not corrected.

11
12 ***Q25. HOW DO YOU RECOMMEND THAT THE COMMISSION TAKE THIS***
13 ***TARIFF ERROR INTO ACCOUNT IN CONSIDERING DEFERRED***
14 ***OPERATING LOSSES?***

15 A25. First, the Company should be directed to immediately adjust its billing system in
16 order to correctly follow the Commission approved tariff. It would then probably
17 be most expedient to apply the actual operating losses from January 2017 through
18 September 2018 of \$208,941 for recovery over a 10-year period as I have
19 recommended. However, the Commission should specifically prohibit the
20 Company from retroactively charging their customers for the tariff error.

21

⁴⁸ It should be noted that there is no clear indication from the record as to when this error began. While the new tariff rates from Docket No. 17-00108 were effective in January 2018, it may well be that this error in the Company's billing system existed prior to that time.

1 **IV. DEFERRED RETURN ON INCREMENTAL PLANT INVESTMENT**

2
3 ***Q26. MR. NOVAK, PLEASE EXPLAIN WHY TENNESSEE WATER SERVICE***
4 ***IS PERMITTED TO DEFER THEIR RETURN ON INCREMENTAL***
5 ***PLANT INVESTMENTS.***

6 A26. Similar to the deferral of operating losses, in Docket No. 17-00108, the
7 Commission also allowed the Company to defer the return on its incremental
8 investment in utility plant that resulted from fire damage. Specifically, the
9 Commission Order on Deferred Return on Incremental Plant Investment reads as
10 follows:

11 Therefore, the panel voted unanimously that TWS should be authorized to create
12 regulatory asset accounts to defer the following:

- 13
14 2. Returns on capital projects necessary to repair fire damage and restore the water
15 system to operational status, which were identified in Mr. Mendenhall's
16 testimony, with such returns to be accrued on the actual amount of the capital
17 assets placed into service at TWS' currently-authorized rate of return of 6.89%,
18 and with such accruals beginning on the date the capital asset is placed into
19 service and continuing until TWS's next rate case petition unless otherwise
20 ordered by the Commission.⁴⁹
21

22 ***Q27. HOW DID THE COMPANY CALCULATE ITS DEFERRED RETURN ON***
23 ***INCREMENTAL PLANT INVESTMENT?***

24 A27. The Company prepared a monthly projection of its known and forecasted plant
25 additions from December 2016 through December 2019, producing cumulative
26 net plant additions of \$757,152.⁵⁰ Next, the Company applied the appropriate
27 pre-tax rate of return to these net plant additions to produce the deferred return of

⁴⁹ Commission Order, Docket No. 17-00108, Page 10.

⁵⁰ Company Filing, Schedule F – Return on Replacement Capital.

1 \$81,197. The Company then proposes to amortize this deferred return over a 5-
2 year period resulting in \$16,239 of annual amortization as shown previously on
3 Table 3.⁵¹

4
5 ***Q28. DO YOU AGREE WITH THE COMPANY'S DEFERRED RETURN ON***
6 ***INCREMENTAL INVESTMENT CALCULATION?***

7 A28. No. Since the Company's original filing in this Docket, they have updated the
8 projected costs for net plant additions from \$757,152 to \$907,083.⁵² As a result, I
9 updated my calculations to reflect these known cost changes. I then applied the
10 same pre-tax rate of return on these net plant additions to produce a deferred
11 return of \$86,486.⁵³ However, I am also recommending that this Deferred Return
12 be amortized over a 10-year period of \$8,649 per year as shown previously on
13 Table 3 in order to recognize its unique and unusual nature. In addition, I have
14 included the unamortized balance of \$82,162 in deferred return within the Rate
15 Base calculation as shown on Table 9.⁵⁴

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18 *[Testimony continues on next page]*

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⁵¹ Direct testimony of Company witness DeStefano, Page 7, Lines 16-18.

⁵² Company response to Consumer Advocate discovery request 3-6, Schedule F.

⁵³ WHN Rate Base Workpaper RB-17-1.01.

⁵⁴ It should be noted that the Company excluded the impact of unamortized deferred return in the Rate Base calculation. Typically, the unamortized balance of authorized regulatory assets is reflected within Rate Base. The Company's testimony does not mention any reason for this omission.

V. DEFERRED RATE CASE COSTS

Q29. MR. NOVAK, HOW DID THE COMPANY CALCULATE ITS DEFERRED RATE CASE COSTS?

A29. The Company began with their costs incurred in Docket No. 17-00108 of \$48,757 and then added their estimated costs for the current docket of \$59,700. The current docket costs of \$59,700 are comprised of the estimate shown below on Table 13.

Table 13 – Company Estimate of Deferred Rate Case Costs ⁵⁵	
Description	Amount
Labor	\$30,300
Travel	2,000
Legal	23,400
Notices, Copies, Mailings	4,000
Total Estimated Rate Case Costs	\$59,700

The rate case costs from Docket No. 17-00108 and the current docket were then aggregated giving \$108,457 in total rate case costs. The Company then proposes to amortize this cost over a 5-year period resulting in \$21,691 of annual amortization as shown previously on Table 3.

Q30. DO YOU AGREE WITH THE COMPANY'S DEFERRED RATE CASE COST CALCULATION?

A30. No. In Docket No. 17-00108, the Commission only authorized the Company to "...accrue and defer up to \$30,000 of reasonable and necessary case expenses."⁵⁶

⁵⁵ Company Filing, Schedule D – Deferred Charges.

⁵⁶ Commission Order in Docket 17-00108, Page 10.

1 I have therefore limited the costs for Docket No. 17-00108 to \$30,000 and then
2 added the Company's estimate of \$59,700 for the current case giving \$89,700 in
3 total deferred rate case costs. I then amortized this deferred cost over the same 5-
4 year period proposed by the Company giving \$17,940 in annual amortization as
5 shown previously on Table 3. In addition, I have included the unamortized
6 balance of \$80,730 in deferred rate case costs within the Rate Base calculation as
7 shown on Table 9.⁵⁷

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14 *[Testimony continues on next page]*
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⁵⁷ It should be noted that the Company excluded the impact of unamortized rate case costs in the Rate Base calculation. Typically, the unamortized balance of authorized regulatory assets is reflected within Rate Base. The Company's testimony does not mention any reason for this omission.

1 VI. REGULATORY LIABILITY – UNINSURED PROPERTY

2
3 ***Q31. MR. NOVAK, WOULD YOU PROVIDE SOME BACKGROUND AND***
4 ***CONTEXT ABOUT THE COMPANY’S UTILITY PLANT AND THE***
5 ***IMPACT OF THE 2016 FIRES ON THAT PLANT AND THE UTILITY.***

6 A31. The wildfires of November 2016 in Gatlinburg destroyed or damaged most of the
7 Company’s utility plant. As shown earlier on Table 11, the Company’s cost to
8 replace and repair the fire damaged water utility plant is over \$870,000. In
9 recognition of that risk, the Company had obtained a property insurance policy.⁵⁸
10 However, even with this exposure of \$870,000, the Company only had a \$48,000
11 insurance policy in place – and this policy was restricted by a \$50,000 deductible
12 clause.⁵⁹ In other words, the Company obtained insurance with a \$48,000 loss
13 limit and a \$50,000 deductible clause.

14
15 Further, as to the specific assets destroyed in the wildfires, the insurance obtained
16 by the Company had a \$24,000 loss limit – with a \$50,000 deductible – on its
17 Wellhouse #1 (Chalet Village North), and, surprisingly, “[a]ll other TWS assets
18 had no replacement loss value per the [insurance] policy.”⁶⁰ It should also be
19 noted that the Company has said that it “does not believe the level of insurance

⁵⁸ Company response to Consumer Advocate Discovery Request 5-2.

⁵⁹ Company response to Consumer Advocate Discovery Request 5-2f.

⁶⁰ Company response to Consumer Advocate Discovery Request 5-2h.

1 coverage was an ‘inadvertent error’ or ‘unintentional omission’” for purposes of
2 its insurance policy.⁶¹

3
4 So, the Company knew it needed insurance, but essentially failed to obtain
5 adequate replacement coverage – much less coverage in the amount that would
6 have afforded even a modest amount of property protection. As a result, the
7 Company’s water system was never protected from a catastrophic event.

8
9 This lack of protection is even more concerning in view of the Company’s regular
10 review of its insurance coverage. According to the Company, “[o]n an annual
11 basis, the operating business units review and update the replacement values on
12 the insurance property schedule before it’s submitted to the insurance carrier.”⁶²
13 Therefore, in view of the wide disparity between the replacement cost provided to
14 the insurance company and the amount now sought to be recovered, it is clear that
15 the Company failed to exercise prudence and due care in protecting its Gatlinburg
16 water utility plant.⁶³

17
18 ***Q32. WAS THE COST FOR INSURANCE INCLUDED IN THE COMPANY’S***
19 ***COST OF SERVICE FOR SETTING RATES?***

⁶¹ Company response to Consumer Advocate Discovery Request 5-2b. On these facts, it is apparent that the Company chose to self-insure against all property losses, then incurred significant property losses when the wildfire occurred, and now seeks to recover these losses from customers.

⁶² Company response to Consumer Advocate discovery request 5-2b.

⁶³ This failure is puzzling in view of the importance and critical nature of those assets to the Company’s water utility business.

1 A32. Yes. The Company has always allocated a portion of the cost for its insurance to
2 Tennessee customers. For the twelve-months prior to the fire in November 2016,
3 the Company allocated a total of \$5,720 to Tennessee customers for insurance
4 expense.⁶⁴ These same type of insurance costs were also considered in prior rate
5 cases before this Commission. However, none of these insurance premiums were
6 ever going to provide any benefit to these customers since the total insurance
7 coverage for Tennessee was below the policy deductible.

8
9 ***Q33. IN VIEW OF THE ABOVE, WOULD YOU NOW EXPLAIN YOUR***
10 ***RATIONALE FOR PROPOSING TO INCLUDE A REGULATORY***
11 ***LIABILITY FOR UNINSURED PROPERTY WITHIN RATE BASE.***

12 A33. Yes. In this case, the Company knew about the underlying risk, obtained wholly
13 inadequate insurance coverage for this risk, charged customers for the cost of that
14 insurance, and now seeks to insulate itself from its own failure to exercise due
15 care by recovering its costs for uninsured plant replacement from customers. In
16 my opinion, it was completely imprudent for the Company's management to
17 conduct business for a water utility in this manner, especially with respect to the
18 assets that are fundamental to the provision of water service to its customers. As
19 between the Company and its customers, in a case like this involving the failure to
20 exercise prudence and due care, the burden of that failure should be borne by the
21 Company.⁶⁵ I am therefore recommending that the Commission establish a

⁶⁴ WHN Expense workpapers E-20-4.01 and E-20-4.02.

⁶⁵ The facts in this case are unlike the facts underlying the Commission's Order Granting Deferred Accounting (November 13, 2013) in Docket No. 13-00121, as cited in Docket No. 17-00108 on Page 9, Footnote 40. That Order contemplates recovery of costs and expenses that result from acts of nature that

1 regulatory liability for TWS that is equivalent to the cost of the replaced utility
2 plant.

3
4 ***Q34. HOW DID YOU COMPUTE THE REGULATORY LIABILITY FOR***
5 ***UNINSURED PROPERTY?***

6 A34. My aim was to completely offset the cost of the tank and well replacement costs
7 that had already been reflected in Rate Base. I began with the cost for the
8 Tank/Booster Station Rehabilitation and the Well/Booster Station Rehabilitation
9 projects with a total cost of \$774,609 as shown earlier on Table 11. I then applied
10 the same depreciation rate and along with the impact from deferred taxes to
11 calculate the attrition period cost in rate base for these two assets of \$757,006 as
12 shown on Table 9.⁶⁶ The related amortization of this regulatory liability of
13 \$11,619 is then reflected on Table 3.

14
15 ***Q35. MR. NOVAK, ARE YOU AWARE OF ANY COMMISSION PRECEDENT***
16 ***FOR ASSIGNING THE COST OF AN ERROR TO THE RESPONSIBLE***
17 ***PARTY?***

18 A35. At the outset, I would point out that I am generally aware of utilities that have
19 made errors or omissions in calculations or in allocating costs to customers and
20 shareholders. Further, when it was the utility's error or omission, I believe the

were neither anticipated nor included in the calculation of net income for the period (for example, through insurance or otherwise). In contrast, in this Docket No. 19-00028, the Company anticipated the property losses and recovered insurance premiums from customers that should have paid for insurance that covered the cost of damaged or lost property. It was only through the Company's lack of prudence and failure to exercise due care that inadequate insurance was obtained, and the Company sustained losses that were not covered by that insurance.

⁶⁶ WHN Rate Base Workpaper RB-19-1.00.

1 utility admitted to the error and did not try to charge customers for its own
2 mistakes. Finally, in these types of cases involving error corrections, the
3 Commission has approved the corrective actions proposed by the utility.

4
5 More specifically to the question at hand, in Docket No. 11-00210, the
6 Commission upheld a \$735,474 charge assessed to ConocoPhillips Company by
7 Chattanooga Gas Company that was due to an inadvertent gas nomination error.
8 As a result, ConocoPhillips Company was required to pay the burden from the
9 error that they caused. Likewise, in this current case, the burden for the
10 imprudent decision resulting in inadequate insurance coverage should be borne by
11 Tennessee Water Service since they were the party causing this error.

VII. COST OF CAPITAL

Q36. MR. NOVAK, PLEASE EXPLAIN THE COMPONENTS THAT MAKE UP THE COST OF CAPITAL.

A36. The Cost of Capital represents the overall return that the Company should be allowed to earn on its net investment in utility plant. This overall return is composed of debt and equity components. As shown on Table 14 below, the Company's proposed Cost of Capital is 7.77% and is then carried over to the revenue requirement calculation shown previously on Table 2.

Table 14 – Cost of Capital ⁶⁷			
Class	Percent	Cost Rate	Weighted Cost Rate
Debt	50.00%	5.04%	2.52%
Equity	50.00%	10.50%	5.25%
Total	100.00%		7.77%

Q37. IS THE CONSUMER ADVOCATE PROPOSING A DIFFERENT COST OF CAPITAL FROM THE CALCULATION SUBMITTED BY THE COMPANY?

A37. For this case, the Consumer Advocate has no objection to the Cost of Capital proposed by the Company that produces an overall return of 7.77%.

⁶⁷ Consumer Advocate Exhibit, Schedule 11.

VIII. REVENUE CONVERSION FACTOR

Q38. MR. NOVAK, PLEASE EXPLAIN THE COMPONENTS THAT MAKE UP THE REVENUE CONVERSION FACTOR.

A38. The Revenue Conversion Factor represents the multiple needed to convert any required operating income deficiency found by the Commission to the revenues necessary to produce that income. More simply stated, any rate increase granted by the Commission will require an increase for taxes and some other fees that are based on income and the Revenue Conversion Factor takes those items into account. As shown on Table 15 below, the Consumer Advocate's Revenue Conversion Factor is 1.337030 that is then carried over to the revenue requirement calculation shown previously on Table 2.

Table 15 – Revenue Conversion Factor		
Item	Amount	Balance
Operating Revenues		1.000000
Add Forfeited Discounts	0.015053	0.015053
Balance		1.015053
Less Uncollectible Ratio	-0.002457	-0.002494
Balance		1.012559
Less State Excise Tax	-0.065000	-0.065816
Balance		0.946742
Less Federal Income Tax	-0.210000	-0.198816
Balance		0.747626
Revenue Conversion Factor (Row 1 / Final Balance)		1.337030

Q39. DID THE COMPANY'S REVENUE CONVERSION FACTOR ALSO CONSIDER THESE SAME COMPONENTS?

1 A39. Not entirely. The Company omitted the forfeited discount ratio in their
2 calculation.⁶⁸ The Company also included the Commission's inspection fee as a
3 component of the Revenue Conversion Factor instead of a separate item on the
4 income statement. The Commission has traditionally included the forfeited
5 discount ratio as a component of the Revenue Conversion Factor, and the
6 Company offers no rationale in their testimony for excluding it. The Commission
7 has also traditionally treated the inspection fee as a prepaid tax for the following
8 year instead of including it as a component of the Revenue Conversion Factor.
9 Again, the Company offers no rationale in their testimony for this treatment. As a
10 result, I recommend that the Commission adopt a Revenue Conversion Factor of
11 1.337030 to be applied to any operating income deficiency that may be found.

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⁶⁸ Company filing, Exhibit 4.

1 A42. Yes. The Company has proposed to change the interim emergency nature of the
2 IEOCPTM in this docket and make this tariff provision permanent as well as
3 changing the base period and base period costs.⁷¹
4

5 ***Q43. DO YOU AGREE WITH THE COMPANY'S PROPOSED CHANGES TO***
6 ***THE IEOCPTM?***

7 A43. No. Instead, I would recommend that the tariff provisions related to the
8 IEOCPTM be terminated. As mentioned above, the Company is already able to
9 completely defer its total operating losses, which has effectively eliminated the
10 need for the IEOCPTM. Further, as previously stated in Part III of my testimony,
11 I am recommending that the Company be allowed to continue deferring its
12 operating losses through December 31, 2019 which would eliminate the need for
13 the IEOCPTM to that date. Finally, the Company has expressed a desire to
14 implement an alternative rate mechanism that would include the purchased water
15 and power components thereby negating the need for a separate IEOCPTM.⁷² As
16 a result, I recommend that the Commission terminate the IEOCPTM since it is no
17 longer needed.
18
19
20

⁷¹ Direct testimony of Company witness DeStefano, Page 10, Line 20 through Page 11, Line 7.

⁷² Direct testimony of Company witness DeStefano, Page 11, Line 11 through Page 12, Line 17 that was subsequently withdrawn from this Docket.

1 **XI. RECOMMENDATIONS**

2
3 ***Q46. MR. NOVAK, COULD YOU PLEASE SUMMARIZE YOUR***
4 ***RECOMMENDATIONS TO THE COMMISSION.***

5 A46. My recommendations are as follows:

- 6 • I recommend that the Company be granted a rate increase of \$73,087 as
7 detailed on the Consumer Advocate Exhibit, Schedule 1 and summarized on
8 Table 2 of my testimony that reflects the Rate Base, Income, Cost of Capital
9 and Revenue Conversion Factor described in Parts I, II, III, IV, V, VI, VII and
10 VIII of my testimony.
- 11 • I recommend that the Company be allowed to continue deferring its operating
12 losses from October 2018 through December 2019 for later recovery in
13 conformance with the Commission's Order in Docket No. 17-00108 as
14 described in Part III of my testimony. Further, I recommend that the
15 Company be prohibited from retroactively charging their customers for errors
16 from the incorrect application of tariff rates.
- 17 • I recommend that the Commission direct the Company to establish a
18 regulatory liability on its books for \$757,006 with an annual amortization of
19 \$11,619 to reflect the imprudent business decisions of the Company that
20 allowed the water assets to remain uninsured for their replacement costs as
21 described in Part VI of my testimony.
- 22 • I recommend that the tariff provisions related to the IEOCPTM be terminated
23 as described in Part IX of my testimony.

- 1 • I recommend that Commission increase the current base charge and usage
2 charges of the Company's tariff by 29.93% as described in Part X of my
3 testimony.

4

5 ***Q47. DOES THIS COMPLETE YOUR TESTIMONY?***

6 A47. Yes, it does. However, I reserve the right to incorporate any new information that
7 that may subsequently become available.

ATTACHMENT WHN-1

William H. Novak Vitae

William H. Novak

19 Morning Arbor Place
The Woodlands, TX 77381

Phone: 713-298-1760

Email: halnovak@whnconsulting.com

Areas of Specialization

Over thirty-five years of experience in regulatory affairs and forecasting of financial information in the rate setting process for electric, gas, water and wastewater utilities. Presented testimony and analysis for state commissions on regulatory issues in four states and has presented testimony before the FERC on electric issues.

Relevant Experience

WHN Consulting – September 2004 to Present

In 2004, established WHN Consulting to provide utility consulting and expert testimony for energy and water utilities. WHN Consulting is a “complete needs” utility regulation firm able to provide clients with assistance in all areas of utility rate analysis. Since 2004, WHN Consulting has provided assistance to public utility commissions and state consumer advocates in over ten state jurisdictions. Some of the topics and issues that WHN Consulting has presented testimony for include net metering, alternative rate regulation, revenue requirement calculations in rate cases, class cost of service studies, rate design, deferred income tax calculations, purchased gas costs, purchased power costs, and weather normalization studies.

Sequent Energy Management – February 2001 to July 2003

Vice-President of Regulatory Compliance for approximately two years with Sequent Energy Management, a gas trading and optimization affiliate of AGL Resources. In that capacity, directed the duties of the regulatory compliance department, and reviewed and analyzed all regulatory filings and controls to ensure compliance with federal and state regulatory guidelines. Engaged and oversaw the work of a number of regulatory consultants and attorneys in various states where Sequent has operations. Identified asset management opportunities and regulatory issues for Sequent in various states. Presented regulatory proposals and testimony to eliminate wholesale gas rate fluctuations through hedging of all wholesale gas purchases for utilities. Also prepared testimony to allow gas marketers to compete with utilities for the transportation of wholesale gas to industrial users.

Atlanta Gas Light Company – April 1999 to February 2001

Director of Rates and Regulatory Analysis for approximately two years with AGL Resources, a public utility holding company serving approximately 1.9 million customers in Georgia, Tennessee, and Virginia. In that capacity, was instrumental in leading

Atlanta Gas Light Company through the most complete and comprehensive gas deregulation process in the country that involved terminating the utility's traditional gas recovery mechanism and instead allowing all 1.5 million AGL Resources customers in Georgia to choose their own gas marketer. Also responsible for all gas deregulation filings, as well as preparing and defending gas cost recovery and rate filings. Initiated a weather normalization adjustment in Virginia to track adjustments to company's revenues based on departures from normal weather. Analyzed the regulatory impacts of potential acquisition targets.

Tennessee Regulatory Authority – Aug. 1982 to Apr 1999; Jul 2003 to Sep 2004

Employed by the Tennessee Regulatory Authority (formerly the Tennessee Public Service Commission) for approximately 19 years, culminating as Chief of the Energy and Water Division. Responsible for directing the division's compliance and rate setting process for all gas, electric, and water utilities. Either presented analysis and testimony or advised the Commissioners/Directors on policy setting issues, including utility rate cases, electric and gas deregulation, gas cost recovery, weather normalization recovery, and various accounting related issues. Responsible for leading and supervising the purchased gas adjustment (PGA) and gas cost recovery calculation for all gas utilities. Responsible for overseeing the work of all energy and water consultants hired by the TRA for management audits of gas, electric and water utilities. Implemented a weather normalization process for water utilities that was adopted by the Commission and adopted by American Water Works Company in regulatory proceedings outside of Tennessee.

Education

B.A, Accounting, Middle Tennessee State University, 1981
MBA, Middle Tennessee State University, 1997

Professional

Certified Public Accountant (CPA), Tennessee Certificate # 7388
Certified Management Accountant (CMA), Certificate # 7880
Former Vice-Chairman of National Association of Regulatory Utility Commission's Subcommittee on Natural Gas

Witness History for William H. Novak, CPA Selected Cases

State	Company/Sponsor	Year	Assignment	Docket
Louisiana	CenterPoint Energy/Louisiana PSC	2011	Audit of PGA Filings from 2002 - 2008 of CenterPoint Arkla	<u>S-32534</u>
	CenterPoint Energy/Louisiana PSC	2011	Audit of PGA Filings from 2002 - 2008 of CenterPoint Entex	<u>S-32537</u>
	Louisiana Electric Utilities/Louisiana PSC	2012	Technical Consultant for Impact of Net Meter Subsidy on other Electric Customers	<u>R-31417</u>
Tennessee	Aqua Utilities/Aqua Utilities	2006	Presentation of Rate Case on behalf of Aqua Utilities	<u>06-00187</u>
	Atmos Energy Corporation/Atmos Intervention Group	2007	Rate design for Industrial Intervenor Group	<u>07-00105</u>
	Bristol TN Essential Services/BTES	2009	Audit of Cost Allocation Manual	<u>05-00251</u>
	Chatanooga Manufacturers Association/CMA	2009	Spokesperson for Industrial Natural Gas Users before the Tennessee State Legislature	<u>HB-1349</u>
	Piedmont Natural Gas Company/Tennessee AG	2011	Rate Case Audit - Revenue, Class Cost of Service Study & Rate Design	<u>11-00144</u>
	Tennessee-American Water Company/Tennessee AG	2012	Rate Case Audit - Revenues, Rate Base, Class Cost of Service Study and Rate Design	<u>12-00049</u>
	Tennessee-American Water Company/Tennessee AG	2013-2017	Alternative Regulation - Audit of Budget & True-up Filings, Rate Design	<u>16-00126</u>
	Piedmont Natural Gas Company/Tennessee AG	2013-2017	Alternative Regulation - Audit of Budget & True-up Filings, Rate Design	<u>16-00140</u>
	Piedmont Natural Gas Company/Tennessee AG	2014	Audit of Recovery of Compressed Natural Gas Infrastructure Costs	<u>14-00086</u>
	Piedmont Natural Gas Company/Tennessee AG	2014	Audit of Accumulated Deferred Federal Income Tax	<u>14-00017</u>
	Atmos Energy Corporation/Tennessee AG	2014	Rate Case Audit - Revenues, O&M Expenses, Rate Base and Rate Design	<u>14-00146</u>
	Atmos Energy Corporation/Tennessee AG	2015-2017	Alternative Regulation - Audit of Budget & True-up Filings, Rate Design	<u>16-00105</u>
	B&W Gas Company/B&W	2015	Presentation of Rate Case on behalf of B&W Gas Company	<u>15-00042</u>
	AEP & Kingsport Power/Tennessee AG	2015	Audit of Storm Costs and Rate Recovery	<u>15-00024</u>
Alabama Illinois New Mexico New York Ohio Texas North Carolina Washington DC NARUC	AEP & Kingsport Power/Tennessee AG	2016	Rate Case Audit - Revenue, Rate Base, Class Cost of Service Study & Rate Design	<u>16-00001</u>
	Jefferson County (Birmingham) Wastewater/Alabama AG	2013	Bankruptcy Filing - Allowable Costs and Rate Design	<u>2009-2318</u>
	Peoples & North Shore Gas Cos./Illinois Commerce Comm.	2007	Management Audit of Gas Purchasing Practices	<u>06-0556</u>
	Southwestern Public Service Co./New Mexico PRC	2010	Financial Audit of Fuel Costs for 2009 and 2010	<u>09-00351-UT</u>
	National Grid/New York PSC	2011	Audit of Affiliate Relationships and Transactions	<u>10-M-0451</u>
	Ohio-American Water Company/Ohio Consumers' Counsel	2010	Rate Case Audit - Class Cost of Service and Rate Design	<u>09-0391-WS-AIR</u>
	Vectren Energy Delivery of Ohio/Ohio Consumers' Counsel	2008	Rate Case Audit - Class Cost of Service and Rate Design	<u>07-1080-GA-AIR</u>
	Duke Energy-Ohio/Public Utilities Commission of Ohio	2009	Focused Management Audit of Fuel & Purchased Power (FPP Riders)	<u>07-0723-EL-UNC</u>
	Center Point Energy/Texas AG	2009	Rate Case Audit - Class Cost of Service and Rate Design	<u>GUD 9902</u>
	Sharyland Utilities/St. Lawrence Cotton Growers Assn.	2017	Rate Case Audit - Class Cost of Service and Rate Design	<u>PUC 45414</u>
	Aqua Utilities/PSS Legal Fund	2011	Rate Case Audit - Class Cost of Service and Rate Design	<u>W-218, Sub-319</u>
	Washington Gas Light Co./Public Service Comm of DC	2011	Audit of Tariff Rider for Infrastructure Replacement Costs	<u>1027</u>
	National Association of Regulatory Utility Commissioners	2015	Presentation of Regulatory Issues with Net Metering Customers on Rates of Electric Utilities	

NOTE: Click on Docket Number to view testimony/report for each case where available.

ATTACHMENT WHN-2
Consumer Advocate Exhibit

**BEFORE
THE TENNESSEE PUBLIC UTILITY COMMISSION**

Application of Tennessee Water Service,
Inc. for Adjustment of Rates and Charges,
Approval of a Qualified Infrastructure
Investment Program, and Modification to
Certain Terms and Conditions for the
Provision of Water Service

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Docket No. 19-00028

**EXHIBIT OF
THE CONSUMER ADVOCATE UNIT
OF THE
FINANCIAL DIVISION
OF THE
OFFICE OF THE TENNESSEE ATTORNEY GENERAL**

July 12, 2019

TENNESSEE WATER SERVICE
INDEX TO SCHEDULES
For the 12 Months Ending December 31, 2020

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TENNESSEE WATER SERVICE
Results of Operations
For the 12 Months Ending December 31, 2020

Line No.		TWS Initial Filing	TWS Revised Filing	Consumer Advocate
<u>1</u>	Rate Base	\$ <u>1,196,687</u> A/	\$ <u>1,351,123</u> C/	\$ <u>1,041,942</u> E/
2	Operating Income At Current Rates	-129,877 A/	-131,838 C/	26,296 F/
3	Earned Rate Of Return	-10.85%	-9.76%	2.52%
4	Fair Rate Of Return	7.77% A/	7.77% C/	7.77% G/
5	Required Operating Income	92,983	104,982	80,960
6	Operating Income Deficiency	222,860	236,820	54,664
7	Gross Revenue Conversion Factor	<u>1.359599</u> B/	<u>1.359599</u> D/	<u>1.337030</u> H/
8	Revenue Deficiency	\$ <u><u>300,444</u></u>	\$ <u><u>318,191</u></u>	\$ <u><u>73,087</u></u>

- A/ Company Filing, Exhibit 2.
B/ Company Filing, Exhibit 4.
C/ Company Revised Filing, Exhibit 2.
D/ Company Revised Filing, Exhibit 4.
E/ CA Exhibit, Schedule 2.
F/ CA Exhibit, Schedule 5.
G/ CA Exhibit, Schedule 11.
H/ CA Exhibit, Schedule 12.

TENNESSEE WATER SERVICE
Average Rate Base
For the 12 Months Ending December 31, 2020

Line No.		Test Period	A/	Adjustments	Attrition Period	A/
	Additions:					
1	Utility Plant in Service	\$ 1,845,378		\$ 779,449	\$ 2,624,827	
2	Working Capital	18,455		-5,843	12,612	B/
3	Deferred Operating Losses	208,941		-10,447	198,494	
4	Deferred Return on Incremental Plant Investment	20,475		61,687	82,162	
5	Deferred Rate Case Costs	48,757		31,973	80,730	
6	Total Additions	\$ 2,142,006		\$ 856,819	\$ 2,998,825	
	Deductions:					
7	Accumulated Depreciation	\$ 459,597		\$ -22,671	\$ 436,926	
8	Contributions in Aid of Construction	659,969		-26,622	633,347	
9	Accumulated Deferred Income Taxes	54,013		3,674	57,687	
10	Regulatory Liability - Excess Deferred Taxes	99,031		-27,114	71,917	
11	Regulatory Liability - Uninsured Property	0		757,006	757,006	
12	Total Deductions	\$ 1,272,610		\$ 684,273	\$ 1,956,883	
13	Rate Base	\$ 869,396		\$ 172,546	\$ 1,041,942	

A/ CA Rate Base Workpaper RB-1-1.00.
B/ CA Exhibit, Schedule 4.

TENNESSEE WATER SERVICE
Comparative Rate Base
For the 12 Months Ending December 31, 2020

Line No.		<u>TWS Initial Filing</u> A/	<u>TWS Revised Filing</u> B/	<u>Consumer Advocate</u> C/
	Additions:			
1	Utility Plant in Service	\$ 2,468,663	\$ 2,598,494	\$ 2,624,827
2	Working Capital	32,408	34,994	12,612
3	Deferred Operating Losses	0	0	198,494
4	Deferred Return on Incremental Plant Investment	0	0	82,162
5	Deferred Rate Case Costs	<u>0</u>	<u>0</u>	<u>80,730</u>
6	Total Additions	<u>\$ 2,501,071</u>	<u>\$ 2,633,488</u>	<u>\$ 2,998,825</u>
	Deductions:			
7	Accumulated Depreciation	\$ 513,922	\$ 513,922	\$ 436,926
8	Contributions in Aid of Construction	633,347	633,347	633,347
9	Accumulated Deferred Income Taxes	59,444	60,147	57,687
10	Regulatory Liability - Excess Deferred Taxes	97,671	74,949	71,917
11	Regulatory Liability - Uninsured Property	<u>0</u>	<u>0</u>	<u>757,006</u>
12	Total Deductions	<u>\$ 1,304,384</u>	<u>\$ 1,282,365</u>	<u>\$ 1,956,883</u>
13	Rate Base	<u>\$ 1,196,687</u>	<u>\$ 1,351,123</u>	<u>\$ 1,041,942</u>

A/ Company Filing, Exhibit 2.

B/ Company Revised Filing, Exhibit 2.

C/ CA Exhibit, Schedule 2.

TENNESSEE WATER SERVICE
Working Capital Allowance
For the 12 Months Ending December 31, 2020

Line No.		Test Period	Adjustments	Attrition Amount
1	Maintenance Expenses	\$ 93,143 A/	\$ -57,398	\$ 35,745 A/
2	General Expenses	15,645 A/	1,828	17,473 A/
3	Other Operating & Maintenance Expenses	89,767 A/	-1,233	88,534 A/
4	General Taxes	17,362 A/	3,082	20,444 A/
5	Total Operating Expenses	\$ 215,917	\$ -53,721	\$ 162,196
6	Less Purchased Water Expense	68,275 B/	-6,974	61,301 B/
7	Net Operating Expenses	\$ 147,642	\$ -46,747	\$ 100,895
8	Working Capital (1/8th of Net Operating Expenses)	\$ 18,455	\$ -5,843	\$ 12,612

A/ CA Exhibit, Schedule 5.

B/ CA Expense Workpaper IS-30.00.

TENNESSEE WATER SERVICE
Income Statement at Current Rates
For the 12 Months Ending December 31, 2020

Line No.		Test Period	Adjustments	Attrition Amount
	Operating Revenues:			
1	Water Sales Revenues	\$ 86,299 A/	\$ 157,857	\$ 244,156 A/
2	Other Revenues	95,318 A/	-90,399	4,919 A/
3	Total Operating Revenue	<u>\$ 181,617</u>	<u>\$ 67,458</u>	<u>\$ 249,075</u>
	Operating & Maintenance Expenses:			
4	Maintenance Expenses	\$ 93,143 B/	\$ -57,398	\$ 35,745 F/
5	General Expenses	15,645 B/	1,828	17,473 F/
6	Other Operating & Maintenance Expenses	89,767 B/	-1,233	88,534 F/
7	Total Operating & Maintenance Expenses	<u>\$ 198,555</u>	<u>\$ -56,803</u>	<u>\$ 141,752</u>
8	Other Expenses:			
9	Depreciation Expense	\$ 27,999 C/	\$ 14,736	\$ 42,735 C/
10	Amortization of Contributions in Aid of Construction	-15,119 C/	-94	-15,213 C/
11	Amortization of Regulatory Liability - Excess Deferred Taxes	0 C/	-2,769	-2,769 C/
12	Amortization of Investment Tax Credits	-48 C/	0	-48 C/
13	Amortization of Deferred Operating Losses	0 C/	20,894	20,894 C/
14	Amortization of Deferred Return on Incremental Plant	0 C/	8,649	8,649 C/
15	Amortization of Deferred Rate Case Costs	0 C/	17,940	17,940 C/
16	Amortization of Regulatory Liability - Uninsured Property	0 C/	-11,619	-11,619 C/
17	General Taxes	17,362 D/	3,082	20,444 D/
18	State Excise Taxes	0 E/	3	3 E/
19	Federal Income Taxes	0 E/	10	10 E/
20	Total Other Expenses	<u>\$ 30,194</u>	<u>\$ 50,833</u>	<u>\$ 81,027</u>
21	Total Operating Expenses	<u>\$ 228,749</u>	<u>\$ -5,970</u>	<u>\$ 222,779</u>
22	Utility Operating Income	<u>\$ -47,132</u>	<u>\$ 73,428</u>	<u>\$ 26,296</u>

A/ CA Revenue Workpaper R-1-1.00.
B/ CA Expense Workpaper IS-15.00.
C/ CA Rate Base Workpaper RB-1-1.00.
D/ CA Exhibit, Schedule 8.
E/ CA Exhibit, Schedule 9.
F/ CA Exhibit, Schedule 7.

TENNESSEE WATER SERVICE
Comparative Income Statement at Current Rates
For the 12 Months Ending December 31, 2020

Line No.		TWS Initial Filing A/	TWS Revised Filing D/	Consumer Advocate G/
	Operating Revenues:			
1	Water Sales Revenues	\$ 169,323	\$ 170,412	\$ 244,156
2	Other Revenues	0	0	4,919
3	Total Operating Revenue	<u>\$ 169,323</u>	<u>\$ 170,412</u>	<u>\$ 249,075</u>
	Operating & Maintenance Expenses:			
4	Maintenance Expenses	\$ 67,433	\$ 66,920	\$ 35,745
5	General Expenses	19,114	19,711	17,473
6	Other Operating & Maintenance Expenses	138,286	138,294	88,534
7	Total Operating & Maintenance Expenses	<u>\$ 224,833</u>	<u>\$ 224,925</u>	<u>\$ 141,752</u>
8	Other Expenses:			
9	Depreciation Expense	\$ 37,669	\$ 39,613	\$ 42,735
10	Amortization of Contributions in Aid of Construction	-15,119	-15,119	-15,213
11	Amortization of Regulatory Liability - Excess Deferred Taxes	-2,719 B/	-2,719 E/	-2,769
12	Amortization of Investment Tax Credits	-48	-48	-48
13	Amortization of Deferred Operating Losses	49,061 C/	49,730 F/	20,894
14	Amortization of Deferred Return on Incremental Plant	16,239 C/	17,297 F/	8,649
15	Amortization of Deferred Rate Case Costs	21,691 C/	21,691 F/	17,940
16	Amortization of Regulatory Liability - Uninsured Property	0	0	-11,619
17	General Taxes	18,874	18,874	20,444
18	State Excise Taxes	-12,754	-12,931	3
19	Federal Income Taxes	-38,527	-39,063	10
20	Total Other Expenses	<u>\$ 74,367</u>	<u>\$ 77,325</u>	<u>\$ 81,027</u>
21	Total Operating Expenses	<u>\$ 299,200</u>	<u>\$ 302,250</u>	<u>\$ 222,779</u>
22	Utility Operating Income	<u>\$ -129,877</u>	<u>\$ -131,838</u>	<u>\$ 26,296</u>

- A/ Company Filing, Exhibit 1.
B/ Company Filing, Schedule G.
C/ Company Filing, Schedule D.
D/ Company Revised Filing, Exhibit 1.
E/ Company Revised Filing, Schedule G.
F/ Company Revised Filing, Schedule D.
G/ CA Exhibit, Schedule 5.

TENNESSEE WATER SERVICE
Comparative O&M Expense Summary
For the 12 Months Ending December 31, 2020

Line No.	Expense	TWS Initial Filing A/	TWS Revised Filing C/	Consumer Advocate
	Maintenance Expenses:			
1	Purchased Power	\$ 8,667	\$ 8,723	\$ 8,527 D/
2	Maintenance & Repair	50,173	50,190	23,240 D/
3	Maintenance Testing	1,908	1,920	1,876 D/
4	Chemicals	241	243	111 D/
5	Transportation	2	2	5 D/
6	Outside Services	6,442	5,842	1,986 D/
7	Total Maintenance Expenses	\$ 67,433	\$ 66,920	\$ 35,745
	General Expenses:			
8	Office Supplies & Other Office Expenses	\$ 2,935	\$ 2,954	\$ 2,882 E/
9	Pension & Other Benefits	6,880	6,924	6,769 E/
10	Rent	2,034	2,047	1,492 E/
11	Insurance	3,379	3,401	3,324 E/
12	Office Utilities	2,370	2,386	1,575 E/
13	Miscellaneous	1,516 B/	1,999 B/	1,431 E/
14	Total General Expenses	\$ 19,114	\$ 19,711	\$ 17,473
	Other Expenses:			
15	Purchased Water	\$ 116,937	\$ 116,937	\$ 60,295 F/
16	Bad Debt	1,179	1,187	600 F/
17	Regulatory	0	0	0 F/
18	Salary & Wages	20,170	20,170	27,639 F/
19	Total Other Expenses	\$ 138,286	\$ 138,294	\$ 88,534
20	Total O&M Expense	\$ 224,833	\$ 224,925	\$ 141,752

A/ Company Filing, Exhibit 1.

B/ Excludes amortization of operating losses, amortization of return on incremental investment and amortization of excess deferred taxes which are reported separately.

C/ Company Revised Filing, Exhibit 1.

D/ Consumer Advocate Expense Workpaper E-10.00.

E/ Consumer Advocate Expense Workpaper E-20.00.

F/ Consumer Advocate Expense Workpaper E-30.00.

TENNESSEE WATER SERVICE
Taxes Other than Income Taxes
For the 12 Months Ending December 31, 2020

Line No.		TWS Initial Filing A/	TWS Revised Filing B/	Consumer Advocate C/
1	Payroll Tax Expense	\$ 1,940	\$ 1,940	\$ 723
2	Franchise Tax Expense	1,792	1,792	1,122
3	Gross Receipts Tax Expense	3	3	144
4	Property Tax Expense	15,139	15,139	18,188
5	Utility Commission Tax Expense	0	0	267
6	Total	\$ 18,874	\$ 18,874	\$ 20,444

A/ Company Filing, Exhibit 1.
B/ Company Revised Filing, Exhibit 1.
C/ CA Expense Workpaper E-40.00.

TENNESSEE WATER SERVICE
Excise and Income Taxes
For the 12 Months Ending December 31, 2020

Line No.		Amount
1	Operating Revenues	\$ <u>249,075 A/</u>
	Operating Expenses:	
2	O&M Expenses	\$ 141,752 A/
3	Depreciation Expense	42,735 A/
4	Net Amortization Expense	17,834 A/
5	General Taxes	20,444 A/
6	Total Operating Expenses	\$ <u>222,765</u>
7	NOI Before Excise and Income Taxes	\$ 26,310
8	Interest Expense	26,257 B/
9	Net Income Before Income Taxes	\$ <u>53</u>
	Tennessee Excise Tax Calculation:	
10	Net Income Before Income Taxes	\$ 53
11	Excise Tax Rate	6.50%
12	Excise Tax Expense	\$ <u>3</u>
	Federal Income Tax Calculation:	
13	Net Income Before Income Taxes	\$ 53
14	State Excise Tax Expense	3
15	Net Income Before Federal Income Tax	\$ <u>50</u>
16	FIT Rate	21.00%
17	Federal Income Tax Expense	\$ <u>10</u>

A/ CA Exhibit, Schedule 5.
B/ CA Exhibit, Schedule 11.

TENNESSEE WATER SERVICE
Income Statement at Proposed Rates
For the 12 Months Ending December 31, 2020

Line No.		Current Rates A/	Rate Increase B/	Proposed Rates
	Operating Revenues:			
1	Water Sales Revenues	\$ 244,156	\$ 73,087	\$ 317,243
2	Other Revenues	4,919	1,100	6,019
3	Total Operating Revenue	\$ 249,075	\$ 74,187	\$ 323,262
	Operating & Maintenance Expenses:			
4	Maintenance Expenses	\$ 35,745	\$ 0	\$ 35,745
5	General Expenses	17,473	0	17,473
6	Other Operating & Maintenance Expenses	88,534	182	88,716
7	Total Operating & Maintenance Expenses	\$ 141,752	\$ 182	\$ 141,934
8	Other Expenses:			
9	Depreciation Expense	\$ 42,735	\$ 0	\$ 42,735
10	Amortization of Contributions in Aid of Construction	-15,213	0	-15,213
11	Amortization of Regulatory Liability - Excess Deferred Taxes	-2,769	0	-2,769
12	Amortization of Investment Tax Credits	-48	0	-48
13	Amortization of Deferred Operating Losses	20,894	0	20,894
14	Amortization of Deferred Return on Incremental Plant	8,649	0	8,649
15	Amortization of Deferred Rate Case Costs	17,940	0	17,940
16	Amortization of Regulatory Liability - Uninsured Property	-11,619	0	-11,619
17	General Taxes	20,444	0	20,444
18	State Excise Taxes	3	4,810	4,814
19	Federal Income Taxes	10	14,531	14,541
20	Total Other Expenses	\$ 81,027	\$ 19,341	\$ 100,368
21	Total Operating Expenses	\$ 222,779	\$ 19,524	\$ 242,302
22	Utility Operating Income	\$ 26,296	\$ 54,664	\$ 80,960

A/ CPAD Exhibit, Schedule 5.
B/ CPAD Exhibit, Schedule 1.

TENNESSEE WATER SERVICE
Rate of Return Summary
For the 12 Months Ending December 31, 2020

Line No.	Class of Capital	Tennessee Water Service			A/
		Percent of Total	Cost Rate	Weighted Cost Rate	
1	Debt	50.00%	5.04%	2.52%	
2	Equity	50.00%	10.50%	5.25%	
3	Total	100.00%		7.77%	
Interest Expense:					
4	Rate Base			\$ 1,041,942	B/
5	Weighted Debt Cost			2.52%	
6	Interest Expense			\$ 26,257	

A/ Company Rate Filing Exhibit - Exhibit 5.
B/ CA Exhibit, Schedule 2.

TENNESSEE WATER SERVICE
Revenue Conversion Factor
For the 12 Months Ending December 31, 2020

Line No.		Amount	Balance
1	Operating Revenues		1.000000
2	Add: Forfeited Discounts	0.015053 A/	0.015053
3	Balance		1.015053
4	Uncollectible Ratio	0.002457 B/	0.002494
5	Balance		1.012559
6	State Excise Tax	0.065000 C/	0.065816
7	Balance		0.946742
8	Federal Income Tax	0.210000 C/	0.198816
9	Balance		0.747926
10	Revenue Conversion Factor (Line 1 / Line 9)		1.337030

A/ CA Revenue Workpaper R-3-1.00.

B/ CA Exhibit, Schedules 5 and 7.

C/ Statutory Rates.

ATTACHMENT WHN-3
Current TWS Tariff Rates
And
TWS Tariff Application



Tennessee
Water Service™

Tennessee Water Service
Customer Service: (800) 531-2321
Collections: (800) 531-2321
Emergency Phone: (800) 531-2321
www.tennesseewaterservice.com

Bill Date	Account Number	Due Date	Please Pay
01/30/2019		02/22/2019	\$75.35

Name

Primary Phone #

Service Address

Activity Since Last Bill

Previous Balance \$91.11
Payments received as of 01/30/2019 -\$91.11
Balance as of 01/30/2019 \$0.00

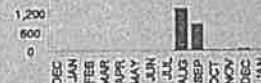
Residential Water Service

2,000 gallons at \$12.85 per 1,000 gallons \$25.70
Remaining 3,230 gallons at \$13.30 per 1,000 gallons \$42.96
Tennessee State Tax at 9.75% \$6.69
Total Residential Water Service \$75.35
Total Amount Due \$75.35

Summary of Service

Meter Reading Meter # 44793527
Current 198170 01/25/2019
Previous 192940 12/27/2018
Usage 5,230 Gallons
Number of Days 29
Average Daily Use 180.34 Gallons
Average Daily Cost \$2.60
Register Constant 1

Billing History
In dollars



Consumption History for Water
In GAL



SOURCE: Company response to Consumer Advocate discovery request 1-5.

A 10% fee will be added if unpaid by the due date. Make check payable to: Tennessee Water Service.
Rate Schedules are available upon request. Visit www.tennesseewaterservice.com for important account offerings.

Messages



Tennessee
Water Service™
PO BOX 160609
Altamonte Springs, FL 32716-0609

Account Number:
Due Date: 02/22/2019
Please Pay: \$75.35

Amount Paid

Tennessee Water Service
PO BOX 11025
LEWISTON ME 04243-9476

☐ Address correction requested on back



Tennessee Water Service
Customer Service: (800) 531-2321
Collections: (800) 531-2321
Emergency Phone: (800) 531-2321
www.tennesseewaterservice.com

Bill Date	Account Number	Due Date	Please Pay
02/27/2019		03/22/2019	\$28.21

Name [REDACTED] Primary Phone # [REDACTED]

Service Address [REDACTED]

Activity Since Last Bill

Previous Balance \$62.69
Payments received as of 02/27/2019 -\$62.69
Balance as of 02/27/2019 \$0.00

Residential Water Service

Minimum Usage Charge up to 2,000 gallons \$25.70
Tennessee State Tax at 9.75% \$2.51
Total Residential Water Service \$28.21
Total Amount Due \$28.21

Summary of Service

Meter Reading Meter # 16025040
Current 681030 02/25/2019
Previous 679320 01/25/2019
Usage 1,710 Gallons
Number of Days 31
Average Daily Use 55.16 Gallons
Average Daily Cost \$0.91
Register Constant 1

Billing History
in dollars



Consumption History for Water
in GAL



SOURCE: Company response to Consumer Advocate discovery request 1-5.

A 10% fee will be added if unpaid by the due date. Make check payable to: Tennessee Water Service.
Rate Schedules are available upon request. Visit www.tennesseewaterservice.com for important account offerings.

Messages



Tennessee
Water Service™
PO BOX 160609
Altamonte Springs, FL 32716-0609

Account Number: [REDACTED]
Due Date: 03/22/2019
Please Pay: \$28.21

Amount Paid

Tennessee Water Service
PO BOX 11025
LEWISTON ME 04243-9476

☐ Address correction requested on back

Applies to Chalet Village North

WATER SERVICE

METERED SERVICEBase Facility Charge per month
0 – 1000 gallons usage per month

Effective January 16, 2018: \$25.70 I

All usage over 1000 Gallons per month \$13.30 per 1000 gallons

DELAYED PAYMENT CHARGE:

An additional charge amounting to ten per cent (10%) of net bill will be added to all water bills under the foregoing schedule, if not paid within twenty-one (21) days of the billing date.

NEW ACCOUNT CHARGE:

Each new account shall pay a one-time service fee of \$20 at the time application for service is filed with the Company.

RECONNECTION CHARGE:

If water service cut off by utility for good cause: \$35.00

If water service discontinued at customer's request: \$35.00

(Customers who ask to be reconnected within 9 months of disconnection will be charged the base facility charge for the service period they were disconnected.)

FREQUENCY OF BILLING:

Bills will be rendered monthly in arrears.

NSF CHECK CHARGE:

A charge of \$10 will be applied to customers whose check is returned by the bank due to non-sufficient funds (one charge per check each time it is returned).

SOURCE: Company tariff filing in Docket No. 17-00108.

Issued 1 16 2018
Month Day YearEffective 1 16 2018
Month Day YearIssued by Matthew Klein
Name of OfficerPresident
Title4944 Parkway Plaza Boulevard, Suite 375, Charlotte, North Carolina 28217
Address of Officer

2. In January 1984, TWS was granted its original Certificate of Convenience and Necessity in Docket No. U-83-7240 to provide water service to customers located in the Chalet Village Subdivision in Sevier County, Tennessee.

3. TWS is engaged in providing drinking water services to approximately 580 customers, although after the 2016 Wildfires only 57 connections remained.

4. The name of the President of TWS and principal address are:

Matthew Klein, President
Tennessee Water Service, Inc.
4944 Parkway Plaza Boulevard, Suite 375
Charlotte, North Carolina 28217

5. The currently-tariffed rates and charges of TWS were approved by TPUC on September 15, 2009, in Docket No. 09-00017. A copy of the Order is attached hereto as Exhibit A. Under the tariff, there is a fixed minimum monthly charge of \$18.70 for 0 - 1000 gallons of usage. Customers are then subject to a volumetric charge of \$13.30 per 1000 additional gallons of usage.

6. The average customer uses approximately 4,000 gallons of water per month and has an average bill of \$58.60.

7. As demonstrated by the newspaper articles attached hereto as Exhibit B, on November 28, 2016, the 2016 Wildfires spread rapidly through the City of Gatlinburg, Tennessee ("Gatlinburg"), and surrounding area tragically destroying and severely damaging many homes and businesses. Approximately 90% of TWS' customers lost their homes, in whole or in part, from the fires.

SOURCE: Company filing in Docket No. 17-00108.

ATTACHMENT WHN-4

Cumulative Impact of
Tariff Error

TENNESSEE WATER SERVICE - REVENUE CALCULATION**Calculation of Cumulative Effect of Improper Tariff Application**

Month	Actual or Forecast	Bills	Tariff Rate	Revenue Impact
January 2018	Actual	149	\$13.30	\$1,982
February	Actual	155	13.30	2,062
March	Actual	163	13.30	2,168
April	Actual	170	13.30	2,261
May	Actual	179	13.30	2,381
June	Actual	183	13.30	2,434
July	Actual	189	13.30	2,514
August	Actual	195	13.30	2,594
September	Actual	198	13.30	2,633
October	Actual	203	13.30	2,700
November	Actual	206	13.30	2,740
December	Actual	209	13.30	2,780
2018 Total				\$29,247
January 2019	Forecast	213	\$13.30	\$2,833
February	Forecast	219	13.30	2,913
March	Forecast	227	13.30	3,019
April	Forecast	234	13.30	3,112
May	Forecast	243	13.30	3,232
June	Forecast	247	13.30	3,285
July	Forecast	253	13.30	3,365
August	Forecast	259	13.30	3,445
September	Forecast	262	13.30	3,485
October	Forecast	267	13.30	3,551
November	Forecast	270	13.30	3,591
December	Forecast	273	13.30	3,631
2019 Total				\$39,461
2018 - 2019 Total Impact				\$68,708

SOURCE: WHN Revenue Workpaper R-2-1.03.

ATTACHMENT WHN-5

Proposed Rate Design

WHN Consulting
TENNESSEE WATER SERVICE - REVENUE CALCULATION
Proposed Rate Design

Attrition Period Bills	Determinant	A/	Current Rate	A/	Current Revenue	Revenue Deficiency	Proposed Revenue	Proposed Rate	Percent Change
	<u>3,732</u>		<u>\$25.70</u>		<u>\$95,912</u>	<u>\$28,711</u>	<u>\$124,624</u>	<u>\$33.39</u>	<u>29.93%</u>
Attrition Period Usage:									
Step 1 - 0 to 1,000 Gallons per Month	4,080		\$0.00		\$0	\$0	\$0	\$0.00	0.00%
Step 2 - Over 1,000 Gallons per Month	11,146		13.30		148,242	44,376	192,618	17.28	29.93%
Total Usage Revenue	<u>15,226</u>				<u>\$148,242</u>	<u>\$44,376</u>	<u>\$192,618</u>		
Attrition Period Sales Revenue					<u>\$244,154</u>	<u>\$73,087</u>	<u>\$317,241</u>		

SOURCE: WHN Revenue Workpaper R-1-1.01.