



Exhibit No:
Issues: Normalized Rate Case Expense;
Capital Structure and Return on Equity;
Correction to Staff's Direct Testimony;
Liberty Utilities' Proposed Rate Design;
Staff's Proposed Rate Design
Witness: William G. Stannard
Type of Exhibit: Surrebuttal Testimony
Case No: WR-2018-0170
SR-2018-0171
Date Testimony Prepared: August 7, 2018

SURREBUTTAL TESTIMONY
OF
WILLIAM G. STANNARD

ON BEHALF OF SILVERLEAF RESORTS INC.

AND ORANGE LAKE COUNTRY CLUB, INC.

FILED³
AUG 24 2018
Missouri Public
Service Commission

LIBERTY UTILITIES (MISSOURI WATER), LLC
D/B/A LIBERTY UTILITIES

CASE NO. WR-2018-0170

Jefferson City, Missouri
August 2018

Exhibit No. 303
Date 8-16-18 Reporter TW
File No. WR-2018-0170

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the matter of Liberty Utilities (Missouri) File No. WR-2018-0170
Water) LLC's Application for Rate Increase.) SR-2018-0171

State of Missouri)
) SS
County of Jackson)

Affidavit of William Stannard

William G. Stannard, being first duly sworn, on his oath states:

1. My name is William Stannard. I am a consultant with Raftelis Financial Consultants, Inc., having its principal place of business at 3013 Main St., Kansas City, Missouri 64108. We have been retained by Silverleaf Resorts, Inc. and Orange Lake Country Club, Inc. in this proceeding on their behalf.
2. Attached hereto and made a part hereof for all purposes are my surrebuttal testimony and schedules which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. WR-2018-0170 and SR-2018-0171.
3. I hereby swear and affirm that the testimony and schedules are true and correct and that they show the matters and things that they purport to show.


William G. Stannard

Subscribed and sworn to before me this 7th day of August 2018.





Notary Public

Table of Contents

BACKGROUND OF WITNESS..... 1

EXECUTIVE SUMMARY..... 1

PERIOD FOR NORMALIZED RATE CASE EXPENSE2

CAPITAL STRUCTURE AND RETURN ON EQUITY3

CORRECTION TO STAFF'S DIRECT TESTIMONY7

LIBERTY UTILITIES' PROPOSED RATE DESIGN.....9

STAFF'S PROPOSED RATE DESIGN 11

1 **BACKGROUND OF WITNESS**

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

3 A. My name is William G. Stannard and my business address is 3013 Main Street, Kansas City,
4 Missouri, 64108.

5
6 **Q. Are you the same William G. Stannard who has previously filed rebuttal testimony in this**
7 **case?**

8 A. Yes, I am.

9 **EXECUTIVE SUMMARY**

10 **Q. Please provide an overview of your surrebuttal testimony.**

11 A. My surrebuttal testimony:

12 (1) Proposes a five-year period for normalization of rate case expense;

13 (2) Responds to the rebuttal testimony of Staff witness David Murray regarding capital
14 structure and return on equity;

15 (3) Confirms that Staff's revised rate design will recover the water and sewer revenue
16 requirement outlined in Staff's rebuttal testimony;

17 (4) Describes my concern that Liberty Utilities' proposed rate design for the Silverleaf
18 water and sewer systems would over-recover the revenue requirement Staff has indicated for these
19 systems in rebuttal testimony.

20 (5) Describes my concern that a rate revenue increase of 75 and 68 percent on Silverleaf's
21 water and sewer systems would cause severe rate shock; and offers a phased-in rate increase to
22 mitigate the rate shock problem created by the size of the proposed increase.

1 rate case expenses. A five-year period is more appropriate and should be approved by the
2 Commission.

3 **CAPITAL STRUCTURE AND RETURN ON EQUITY**

4 **Q. Has either Staff or Liberty Utilities provided rebuttal testimony on capital structure and**
5 **return on equity?**

6 A. Yes. Staff witness David Murray filed rebuttal testimony on rate of return and capital structure
7 in support of Staff's proposed capital structure and return on equity. Liberty Utilities, through the
8 direct testimony of its witness Jill Schwartz, relies, problematically, on the testimony of Keith
9 Magee, who prepared testimony regarding cost of capital and served as a witness in a recent
10 Liberty Mid-States gas rate case (GR-2018-0013). The capital structure and return on equity
11 Liberty Utilities is proposing for this water and sewer case, is completely reliant upon the attached
12 testimony of Liberty Utilities Witness Keith Magee from the gas rate case. His testimony, which
13 has been attached to Ms. Schwartz's direct testimony, provides no risk analysis for a water utility
14 and was not prepared in connection with this case. Further, Ms. Schwartz provides no rationale
15 regarding the applicability of the cost of capital parameters developed for a natural gas case to a
16 water and sewer case.

17

18 **Q. Why do you say that Ms. Schwartz use of Mr. Magee's testimony from a different case is**
19 **"problematic?"**

20 A. Mr. Magee is not a witness to this case and therefore Silverleaf has no opportunity to ask
21 questions about this testimony. The testimony does not analyze the risk profile of a water utility,
22 and does not provide any support for a finding that the gas and water utility industries are similar.

1 Policy choices should not be based on extraneous services having little connection to the case at
2 hand.

3 Ms. Schwartz' proposal to use the same return on equity for this case as Mr. Magee developed for
4 a natural gas case implies that the business risk of the two industries is the same, which is
5 unreasonable. While Liberty Utilities (Missouri Water) and Liberty Mid-States are both utility
6 affiliates under the same parent company, the two industries do not have comparable business risk
7 profiles. Water utilities are generally completely vertically integrated, with the utility owning all
8 of the assets involved in the production and distribution of water. Natural gas utilities are
9 significantly less vertically integrated with different companies involved in the development of
10 natural gas supply, production, transmission and distribution. Water utilities do not have to
11 purchase their supply on an open market as gas utilities do. Gas utilities face competition from
12 electric utilities, whose product can also be used for cooking and heating. There is no alternative
13 commodity which can be substituted for water and sewer service. Also, gas is a flammable and
14 combustible resource, unlike water. So, the transportation of gas carries safety risks that do not
15 occur with a water utility.

16

17 Given these factors, the business risk of water and sewer utilities is lower than that of natural gas
18 utilities, not the same. Accordingly, I maintain the position in my direct testimony that a
19 reasonable return on equity would range between 8.00 and 9.00 percent, employing the capital
20 structure included in Staff Witness Paul Harrison's direct testimony.

1 **Q. Please summarize the content of Mr. Murray's rebuttal testimony.**

2 A. Mr. Murray's testimony was filed in support of Staff's proposed capital structure and return on
3 equity in this case. Mr. Murray served as a Staff witness in the same Liberty Mid-States gas case
4 as Mr. Magee. Mr. Murray recommends employing the return on equity range and capital structure
5 employed in his testimony in GR-2018-0013, rather than that of Mr. Magee. I note that the ALJ
6 in this case has required that Mr. Murray refile his rebuttal testimony without reference to GRS-
7 2018-0013. I am at a disadvantage in being able to directly respond to Mr. Murray's rebuttal
8 testimony that will become part of the record in this docket, given the short window between the
9 re-filing of Mr. Murray's rebuttal, and the deadline for surrebuttal testimony.

10

11 **Q. Did Mr. Murray provide direct testimony regarding capital structure or return on equity?**

12 A. No. Mr. Murray's **rebuttal** testimony represents the first detailed analysis Staff has provided
13 regarding these issues.

14

15 **Q. Does this failure to file a detailed analysis with its case in chief create concerns for**
16 **Silverleaf?**

17 Yes. Because Staff waited until rebuttal to file its detailed analysis, Silverleaf was prevented from
18 performing discovery and preparing rebuttal testimony on this analysis. Instead, Silverleaf's
19 opportunity to rebut this testimony was limited to the much shorter time period before surrebuttal
20 was due. Accordingly, Silverleaf filed a motion to strike portions of Mr. Murray's testimony as
21 improper supplemental direct testimony. As mentioned above, that motion was granted and Mr.
22 Murray will be re-filing his rebuttal testimony.

23

1 **Q. To confirm, both Liberty and Staff are relying upon testimony from a natural gas case to**
2 **support their proposed capital structure and return on equity in this case, correct?**

3 A. That is correct. That said, it is noteworthy that while the method is the same (applying the gas
4 capital structure and return on equity to this case) the parameters used for capital structure and
5 return on equity differ. Mr. Magee's testimony from the gas case has been attached to Ms.
6 Schwartz' testimony in support of Liberty's proposed capital structure (53.00 percent equity, 47.00
7 percent debt) and return on equity (10.25 percent). Mr. Murray's rebuttal testimony has been filed
8 in support of Staff's capital structure (42.83 percent equity, 57.17 percent debt) and return on
9 equity (10.00 percent). As discussed in my rebuttal testimony, Staff's proposed capital structure
10 is reasonable, while Liberty Utilities' is not. Further the return on equity proposed by both Liberty
11 and Staff are not reasonable.

12

13 **Q. Taking into consideration the additional analysis provided by Mr. Murray, do you still**
14 **believe Staff's proposed return on equity is unreasonable?**

15 A. Yes, for three reasons. First, Mr. Murray proposes employing the same return on equity to this
16 water case as he developed for a natural gas case. The primary purpose of including return on
17 equity in the revenue requirement is to compensate the utility for the business risk it faces. Mr.
18 Murray indicates that it is reasonable to employ the same return on equity because both affiliates
19 (Liberty Utilities (Missouri Water) and Liberty Mid-States) are financed under the same corporate
20 structure and have similar business risk profiles. I disagree that the business risk profiles are the
21 same. The risks to water utilities are lower, for the reasons stated above. Accordingly, a more
22 appropriate range would be between 8.00 and 9.00 percent, not the 10.00 percent proposed by Mr.
23 Murray. Second, as stated in my rebuttal testimony, Liberty Utilities (Missouri Water) is a state

1 operating subsidiary of a much larger parent company, which mitigates the overall business risk
2 of the subsidiary company. Finally, Liberty Utilities current rate structure for Silverleaf water and
3 sewer recovers approximately 35 percent of revenues in the fixed charge. Staff is proposing
4 increasing this to 52 percent, which significantly mitigates weather risk and other factors, which
5 causes customer usage to vary. Thus, the return on equity in this case should recognize the lower
6 business risk accomplished by the desired rate design.

7

8 **Q. Did Staff and Liberty Utilities propose a return on equity and capital structure in their**
9 **Non-Unanimous Stipulation and Agreement filed on August 3?**

10 A. The Non-Unanimous Stipulation and Agreement does include an agreed upon return on equity,
11 but **does not** reference an agreed upon capital structure. This is unacceptable. The Commission
12 should **not** issue an order which is silent on capital structure, because it has a profound impact on
13 the revenue requirement used to develop the water and sewer rates for Silverleaf. For the purposes
14 of determining the revenue requirement, establishing a return on equity is meaningless without
15 also establishing the equity layer to which that return on equity is applied. If the Commission
16 approves a 9.75 percent return on equity, but is silent on capital structure, Liberty Utilities could
17 be allowed up to a 9.75 percent overall rate of return¹. Staff has repeatedly emphasized the
18 appropriateness of a capital structure consisting of 42.83 percent equity and 57.17 percent debt,
19 which I support. If the Commission were to approve the 9.75 percent return on equity, it should
20 be accompanied by a stated capital structure of 42.83 percent equity and 57.17 percent debt.

¹ The maximum allowed based on a capital structure consisting of 100.00 percent equity, and 0.00 percent debt.

CORRECTION TO STAFF'S DIRECT TESTIMONY

Q. You indicated in your direct testimony that Staff agreed to correct an error identified in the calculation of Silverleaf's water rates. Has Staff provided rebuttal testimony correcting this error?

A. Yes. Staff witness Matthew Barnes filed rebuttal testimony which included an explanation of the error and its resolution. Mr. Barnes also provided updated workpapers which include the revised Silverleaf water rate. **Tables 1 and 2** indicate an updated revenue proof which demonstrates that the Silverleaf water and sewer rates proposed in Staff's rebuttal testimony would recover Staff's proposed revenue requirement.

**Table 1: Water Rate Revenue Proof – Staff Rebuttal
(Holiday Hills, Timber Creek, Ozark Mountain)**

Rate	Units	Charge	Revenue
Fixed Charge			
3/4"	644	\$ 26.73	\$ 206,568
1"	21	45.44	11,451
2"	80	106.92	102,642
3"	10	294.03	35,283
4"	3	374.22	13,472
Total Fixed	758		\$ 369,416
Commodity Charge	36,510	\$ 6.75	\$ 246,311
	Total Water Revenue		\$ 615,727
	Rebuttal Workpapers		\$ 615,727
	Variance		\$ -

**Table 2: Sewer Rate Revenue Proof – Staff Rebuttal
(Timber Creek, Ozark Mountain)**

Rate	Units	Charge	Revenue
Fixed Charge			
3/4"	228	\$ 34.02	\$ 93,087
1"	3	57.84	2,082
2"	14	180.32	30,294
3"	1	340.23	4,083
Total Fixed	246		\$ 129,546
Commodity Charge	8,187	\$ 25.55	\$ 209,193
	Total Sewer Revenue		\$ 338,739
	Rebuttal Workpapers		\$ 338,739
	Variance		\$ -

1 **Q. Has Staff made any other changes in rebuttal testimony which impact the calculation of**
2 **the Silverleaf water and sewer rates?**

3 A. Yes. Mr. Harrison's rebuttal testimony indicates that Staff made further adjustments to the
4 revenue requirement to reflect updated information they received regarding contributions in aid of
5 construction (CIAC). This reduced the revenue requirement for the Silverleaf water and sewer
6 systems by approximately \$11,000.

7

8 **Q. Do these changes resolve the concern raised in your rebuttal testimony?**

9

10 A. Yes. Staff has adequately addressed the specific Staff calculation errors I described in my
11 rebuttal testimony. As described below, Liberty Utilities has not addressed the significant errors
12 included in Liberty Utilities' direct testimony, and they remain unaddressed in Liberty Utilities'
13 rebuttal testimony.

14

LIBERTY UTILITIES' PROPOSED RATE DESIGN

15 **Q. Has Liberty Utilities' provided any rebuttal testimony regarding rate design?**

16 A. Yes. Ms. Schwartz' testimony reiterates the company's proposal to consolidate the rates of the
17 KMB and Noel systems, or in the alternative consolidate the rates of at least the KMB systems.
18 The water and sewer rates for the Silverleaf systems are not addressed in Ms. Schwartz' testimony.
19 Accordingly, I remain concerned about the unexplained changes in Liberty's proposed Silverleaf
20 water and sewer rate structure.

1 **Q. Other than the rate structure issues you previously identified, are there any other areas**
2 **of ongoing concern which have not been addressed in Liberty Utilities' rebuttal testimony.**
3 A. Yes. As discussed in my rebuttal testimony, Ms. Schwartz's direct testimony appears to
4 indicate agreement with Staff's revenue requirement in all areas except capital structure and return
5 on equity. But the difference between Staff and Liberty Utilities on capital structure and return on
6 equity do *not* explain the significant discrepancy between the revenue requirement proposed by
7 Liberty and that proposed by Staff for the Silverleaf Systems. **Tables 3 and 4** indicate the revenue
8 proof for the rates proposed in Liberty Utilities' direct testimony. As indicated, these revenues
9 would exceed the revenue requirement proposed by Staff, both in direct testimony and rebuttal
10 testimony.

11 **Table 3: Proposed Water Rates from JMS-2**
12 **(Holiday Hills, Timber Creek, Ozark Mountain)**
13
14

	3/4"	1"	1.5"	2"	2.5"	3"	4"	Total
Rates								
Fixed (\$/Mo)	\$ 24.51	\$ 40.83	\$ -	\$ 130.62	\$ -	\$ 244.92	\$ 408.20	
Commodity	\$ 9.74	\$ 12.88	\$ -	\$ 5.69	\$ -	\$ 5.80	\$ 5.80	
Units								
Accounts	648	21	-	81	-	10	3	763
Usage	15,410	2,063	-	14,855	-	3,254	2,006	37,588
Revenues								
Fixed \$	\$ 190,590	\$ 10,289	\$ -	\$ 126,963	\$ -	\$ 29,390	\$ 14,695	\$ 371,927
Commodity \$	150,093	26,571	-	84,525	-	18,873	11,635	291,698
Total Revenue	\$ 340,683	\$ 36,861	\$ -	\$ 211,488	\$ -	\$ 48,264	\$ 26,330	\$ 663,625
						Staff Rebuttal	\$	615,727
						Variance	\$	47,898
						Staff Direct	\$	620,270
						Variance	\$	43,355

15

1
2
3

**Table 4: Proposed Sewer Rates from JMS-2
(Timber Creek, Ozark Mountain)**

	3/4"	1"	1.5"	2"	2.5"	3"	4"	Total
Rates								
Fixed	\$ 57.97	\$ 47.82	\$ 95.62	\$ 153.00	\$ 229.50	\$ 286.88	\$ 478.12	
Commodity	\$ 30.91	\$ 30.91	\$ 30.91	\$ 30.91	\$ 30.91	\$ 30.91	\$ 30.91	
Units								
Accounts	228	3	-	14	-	1	-	246
Usage	4,560	627	-	3,119	-	311	-	8,617
Revenues								
Fixed \$	\$ 158,606	\$ 1,722	\$ -	\$ 25,704	\$ -	\$ 3,443	\$ -	\$ 189,474
Commodity \$	140,950	19,381	-	96,408	-	9,613	-	266,351
Total Revenue	\$ 299,556	\$ 21,102	\$ -	\$ 122,112	\$ -	\$ 13,056	\$ -	\$ 455,825
						Staff Rebuttal	\$	338,739
						Variance	\$	117,086
						Staff Direct	\$	344,797
						Variance	\$	111,028

4
5
6
7
8
9
10
11
12
13
14
15
16

Even accounting for Liberty Utilities' desired capital structure and return on equity, Liberty Utilities has miscomputed and overstated the revenue requirement needed to service their desired capital structure and return on equity. The revenues which would be generated under the water rates proposed in Ms. Schwartz's testimony (see Schedule JMS-2) would exceed the revenue requirement proposed in Staff's rebuttal testimony by \$48,000 for the Silverleaf water systems alone. The same is true of the sewer rates, which would over-recover the sewer revenue requirement in Staff's rebuttal testimony by \$117,000. As discussed in my rebuttal testimony, this difference is too large to be explained by the differences in the capital structure and return on equity proposed by Liberty and Staff. Excluding capital structure and return on equity, Liberty Utilities has provided no testimony in support of a revenue requirement that differs from that being proposed by Staff. In other words, approving Liberty Utilities' proposed revenue requirement would allow the utility to significantly over-earn. The Commission must ensure that the revenue

1 requirement that it uses to set rates is the actual, calculated amount rather than the over-stated
2 numbers included in Liberty Utilities' testimony.

3 **STAFF'S PROPOSED RATE DESIGN**

4 **Q. Has Staff made any changes to the proposed Silverleaf water and sewer rates since your**
5 **direct testimony?**

6 A. Yes. Staff has revised the water rate design for Silverleaf water. In addition, Staff has reduced
7 the overall revenue requirement for the Silverleaf water and sewer systems as discussed above.

8

9 **Q. Have these changes alleviated any of the concerns regarding rate shock identified in your**
10 **direct testimony?**

11 A. No. The overall increase in revenues as proposed by Staff still results in increases of 75 percent
12 and 68 percent for water and sewer, respectively. Further, the increases are still heavily weighted
13 toward the fixed customer charge, which places most of the burden of the large overall rate revenue
14 increase on the smallest volume users of the Silverleaf water and sewer systems and reduces the
15 incentive for ratepayers to use water responsibly, as stated in my rebuttal testimony. Consequently,
16 I maintain my proposal for an across the board increase to the Silverleaf water and sewer rate
17 schedules, as well as a 4-year phase-in of the proposed revenue increase.

18

19 **Q. Have you updated your rate design proposal and proposed phase-in to reflect the updated**
20 **revenue requirement presented by Staff in their rebuttal testimony?**

21 A. I have. **Tables 5 through 12** below represent updated impacts, alternative rate designs and
22 proposed phase-ins based on the revenue requirement presented in Staff's rebuttal testimony. For

1 ease of reference, I have included the table number and page number of these same tables from
 2 my rebuttal testimony.

3 **Table 5: Fixed and Variable Revenues**
 4 **(Table 6, p. 17 in Rebuttal)**
 5

	Existing			Staff Direct			Staff Rebuttal		
	Fixed	Variable	Total	Fixed	Variable	Total	Fixed	Variable	Total
Water \$	\$ 134,974	\$ 217,598	\$ 352,572	\$ 478,601	\$ 248,266	\$ 726,867	\$ 369,416	\$ 246,311	\$ 615,727
Sewer \$	60,992	141,150	202,142	132,736	212,382	345,118	129,546	209,193	338,739
Total \$	\$ 195,965	\$ 358,748	\$ 554,714	\$ 611,336	\$ 460,648	\$ 1,071,985	\$ 498,962	\$ 455,504	\$ 954,466
Water %	38%	62%	100.0%	66%	34%	100.0%	60%	40%	100.0%
Sewer %	30%	70%	100.0%	38%	62%	100.0%	38%	62%	100.0%
Total %	35%	65%	100.0%	57%	43%	100.0%	52%	48%	100.0%
Water % Δ				255%	14%	106%	174%	13%	75%
Sewer % Δ				118%	50%	71%	112%	48%	68%
Total % Δ							155%	27%	72%

6
 7
 8 **Table 6: Monthly Water Bill Impacts**
 9 **(Holiday Hills, Timber Creek, Ozark Mountain)**
 10 **(Table 7, p. 19 in Rebuttal)**
 11

	Existing	Staff Direct	Staff Rebuttal
Usage (1,000 Gal.)	2	2	2
Meter Size	3/4"	3/4"	3/4"
Fixed Charge	\$ 8.96	\$ 31.81	\$ 26.73
Commodity Rate	\$ 5.96	\$ 6.80	\$ 6.75
Fixed Portion of Bill	\$ 8.96	\$ 31.81	\$ 26.73
Commodity Portion of Bill	\$ 11.92	\$ 13.60	\$ 13.49
Total Bill	\$ 20.88	\$ 45.41	\$ 40.22
% Increase (Fixed)		255.0%	198.3%
% Increase (Commodity)		14.1%	13.2%
% Increase Bill		117.5%	92.6%

1
2
3
4

**Table 7: Monthly Water Bill Impacts
(Holiday Hills, Timber Creek, Ozark Mountain)
(Table 8, p. 19 in Rebuttal)**

	<u>Existing</u>	<u>Staff Direct</u>	<u>Staff Rebuttal</u>
Usage (1,000 Gal.)	1	1	1
Meter Size	3/4"	3/4"	3/4"
Fixed Charge	\$ 16.00	\$ 34.86	\$ 34.02
Commodity Rate	\$ 17.24	\$ 25.94	\$ 25.55
Fixed Portion of Bill	\$ 16.00	\$ 34.86	\$ 34.02
Commodity Portion of Bill	\$ 17.24	\$ 25.94	\$ 25.55
Total Bill	\$ 33.24	\$ 60.80	\$ 59.57
% Increase (Fixed)		117.9%	112.6%
% Increase (Commodity)		50.5%	48.2%
% Increase Bill		82.9%	79.2%

5
6
7
8
9
10

**Table 8: Monthly Water Bill Impacts – 3/4" Meter
(Holiday Hills, Timber Creek, Ozark Mountain)
(Table 9, p. 20 in Rebuttal)**

	<u>20th Percentile</u>	<u>40th Percentile</u>	<u>Median</u>	<u>60th Percentile</u>	<u>80th Percentile</u>
Existing Structure					
Fixed	\$ 8.96	\$ 8.96	\$ 8.96	\$ 8.96	\$ 8.96
Commodity	\$ 5.96	\$ 5.96	\$ 5.96	\$ 5.96	\$ 5.96
Staff Direct					
Fixed	\$ 31.81	\$ 31.81	\$ 31.81	\$ 31.81	\$ 31.81
Commodity	\$ 6.80	\$ 6.80	\$ 6.80	\$ 6.80	\$ 6.80
Staff Rebuttal					
Fixed	\$ 26.73	\$ 26.73	\$ 26.73	\$ 26.73	\$ 26.73
Commodity	\$ 6.75	\$ 6.75	\$ 6.75	\$ 6.75	\$ 6.75
Bill Impact (at Rebuttal Rates)					
Usage (gal.)	-	460	900	1,492	2,832
Existing	\$ 8.96	\$ 11.70	\$ 14.32	\$ 17.85	\$ 25.84
Proposed	\$ 26.73	\$ 29.83	\$ 32.80	\$ 36.80	\$ 45.84
\$ Change	\$ 17.77	\$ 18.13	\$ 18.48	\$ 18.94	\$ 20.00
% Change	198.3%	154.9%	129.0%	106.1%	77.4%

11

1
2
3
4

**Table 9: Monthly Sewer Bill Impacts – 3/4” Meter
(Timber Creek, Ozark Mountain)
(Table 10, p. 21 in Rebuttal)**

	20th Percentile	40th Percentile	Median	60th Percentile	80th Percentile
Existing Structure					
Fixed	\$ 16.00	\$ 16.00	\$ 16.00	\$ 16.00	\$ 16.00
Commodity	\$ 17.24	\$ 17.24	\$ 17.24	\$ 17.24	\$ 17.24
Staff Direct					
Fixed	\$ 34.86	\$ 34.86	\$ 34.86	\$ 34.86	\$ 34.86
Commodity	\$ 25.94	\$ 25.94	\$ 25.94	\$ 25.94	\$ 25.94
Staff Rebuttal					
Fixed	\$ 34.02	\$ 34.02	\$ 34.02	\$ 34.02	\$ 34.02
Commodity	\$ 25.55	\$ 25.55	\$ 25.55	\$ 25.55	\$ 25.55
Bill Impact (at Rebuttal Rates)					
Usage (gal.)	-	210	500	840	2,138
Existing	\$ 16.00	\$ 19.62	\$ 24.62	\$ 30.48	\$ 52.85
Proposed	\$ 34.02	\$ 39.39	\$ 46.80	\$ 55.49	\$ 88.64
\$ Change	\$ 18.02	\$ 19.77	\$ 22.18	\$ 25.00	\$ 35.79
% Change	112.6%	100.8%	90.1%	82.0%	67.7%

5
6
7
8
9
10
11

**Table 10: Across the Board Water Rate Increase vs. Staff Rebuttal
(Holiday Hills, Timber Creek, Ozark Mountain)
(Table 11, p. 23 in Rebuttal)**

Rate	Existing		Across the Board		Staff Rebuttal	
	Charge		Charge	% Δ	Charge	% Δ
Fixed Charge						
3/4"	\$ 8.96		\$ 15.65	74.6%	\$ 26.73	198.3%
1"	14.93		26.07	74.6%	45.44	204.4%
2"	47.76		83.41	74.6%	106.92	123.9%
3"	89.55		156.39	74.6%	294.03	228.3%
4"	149.25		260.65	74.6%	374.22	150.7%
Total Fixed						
Commodity Charge	\$ 5.96		\$ 10.41	74.6%	\$ 6.75	13.2%
Fixed %		38.3%		38.3%		60.0%
Variable %		61.7%		61.7%		40.0%

12

1
2
3
4

**Table 11: Across the Board Sewer Rate Increase vs. Staff Rebuttal
(Timber Creek, Ozark Mountain)
(Table 12, p. 24 in Rebuttal)**

Rate	Existing		Across the Board		Staff Rebuttal	
	Charge		Charge	% Δ	Charge	% Δ
Fixed Charge						
3/4"	\$ 16.00		\$ 26.81	67.6%	\$ 34.02	112.6%
1"	26.67		44.69	67.6%	57.84	116.9%
2"	85.33		142.99	67.6%	180.32	111.3%
3"	160.00		268.12	67.6%	340.23	112.6%
Total Fixed						
Commodity Charge	\$ 17.24		\$ 28.89	67.6%	\$ 25.55	48.2%
Fixed %	30.2%		30.2%		38.2%	
Variable %	69.8%		69.8%		61.8%	

5
6
7
8
9
10

**Table 12: Fixed Charge² Comparison
(Table 13, p. 25 in Rebuttal)**

	Water	Sewer
Missouri American Water	\$ 9.00	
St. Louis MSD Sewer		\$ 21.52
Kansas City Water Services	\$ 14.10	\$ 21.30
Lee's Summit	\$ 9.95	\$ 14.15
Columbia	\$ 9.75	\$ 12.25
Cape Girardeau	\$ 8.48	\$ 12.69
Average	\$ 10.26	\$ 16.38
Silverleaf Water and Sewer		
Existing	\$ 8.96	\$ 16.00
Across the Board	\$ 15.65	\$ 26.81
Staff Rebuttal	\$ 26.73	\$ 34.02

11

² For utilities that have a meter size based fixed charge, charge is based on smallest meter size.

1
2
3
4

**Table 13: 4-Year Phase-In of Water Rate Increase
(Holiday Hills, Timber Creek, Ozark Mountain)
(Table 14, p. 26 in Rebuttal)**

Rate	Existing	Proposed	Year 1	Year 2	Year 3	Year 4	Year 5
	Charge	Charge	Charge	Charge	Charge	Charge	Charge
Fixed Charge							
3/4"	\$ 8.96	\$ 15.65	\$ 10.30	\$ 13.62	\$ 17.30	\$ 21.37	\$ 15.65
1"	14.93	26.07	17.16	22.70	28.82	35.61	26.07
2"	47.76	83.41	54.90	72.62	92.20	113.91	83.41
3"	89.55	156.39	102.94	136.16	172.88	213.58	156.39
4"	149.25	260.65	171.57	226.93	288.13	355.96	260.65
Commodity Charge	\$ 5.96	\$ 10.41	\$ 6.85	\$ 9.06	\$ 11.51	\$ 14.21	\$ 10.41

5
6
7
8
9
10
11

**Table 14: 4-Year Phase-In of Sewer Rate Increase
(Timber Creek, Ozark Mountain)
(Table 15, p. 27 in Rebuttal)**

Rate	Existing	Proposed	Year 1	Year 2	Year 3	Year 4	Year 5
	Charge	Charge	Charge	Charge	Charge	Charge	Charge
Fixed Charge							
3/4"	\$ 16.00	\$ 26.81	\$ 18.20	\$ 23.58	\$ 29.48	\$ 35.98	\$ 26.81
1"	26.67	44.69	30.34	39.31	49.15	59.97	44.69
2"	85.33	142.99	97.09	125.76	157.25	191.87	142.99
3"	160.00	268.12	182.04	235.81	294.85	359.78	268.12
Commodity Charge	\$ 17.24	\$ 28.89	\$ 19.62	\$ 25.41	\$ 31.77	\$ 38.77	\$ 28.89

12
13
14
15
16

Q. Does this conclude your surrebuttal testimony?

A. Yes.