

Exhibit No.:

Issue: Return on Equity

Witness: Shana Atkinson

Sponsoring Party: MoPSC Staff

Type of Exhibit: Rebuttal Testimony

Case Nos.: SR-2014-0166 and

WR-2014-0167

Date Testimony Prepared: September 12, 2014

MISSOURI PUBLIC SERVICE COMMISSION
REGULATORY REVIEW DIVISION
UTILITY SERVICES – FINANCIAL ANALYSIS

REBUTTAL TESTIMONY

OF

SHANA ATKINSON

HICKORY HILLS WATER & SEWER COMPANY

CASE NOS. SR-2014-0166 & WR-2014-0167

Jefferson City, Missouri
September 2014

REBUTTAL TESTIMONY

OF

SHANA ATKINSON

HICKORY HILLS WATER & SEWER COMPANY

CASE NOS. SR-2014-0166 & WR-2014-0167

Q. Please state your name.

A. My name is Shana Atkinson.

Q. What is your present position with the Missouri Public Service Commission (Commission)?

A. I am a Utility Regulatory Auditor III in the Financial Analysis Unit.

Q. What is your educational background?

A. In May 2007, I earned a Bachelor of Science in Accountancy and a Master of Accountancy degree from the University of Missouri-Columbia. My accounting degree required an understanding of financial concepts, including the cost of capital.

On June 21, 2010 I was awarded the Certified Rate of Return Analyst (CRRRA) professional designation by the Society of Utility and Regulatory Financial Analysts (SURFA). This designation is awarded based upon experience and successful completion of a written examination, which I completed during my attendance at a SURFA conference in April 2010.

Q. Have you filed testimony in other cases before this Commission?

A. Yes. Please see Schedule SA-1.

1 Q. Have you made recommendations in any other cases before this Commission?

2 A. Yes. I have developed rate of return recommendations for numerous small
3 water and sewer rate cases and have made recommendations in finance cases, small water
4 and sewer certificate cases, and telephone certificate cases.

5 Q. What is the purpose of your rebuttal testimony?

6 A. The purpose of my rebuttal testimony is to respond to the direct testimony of
7 Keri Roth on Return on Equity (ROE). Ms. Roth sponsored testimony on behalf of the
8 Missouri Office of the Public Counsel ("OPC").

9 Q. Ms. Roth discusses Staff's ROE recommendation of 11.93%. Does Staff need
10 to make any changes to its ROE recommendation?

11 A. Yes. Staff's recommended ROE should have been 12.04 percent. Staff found
12 an error in its original estimate of 11.93 percent. The average yield of 30-year public utility
13 bonds with a 'BB' rating for November 2013, December 2013 and January 2014 was
14 approximately 8.04 percent (November 2013-8.05 percent; December 2013-8.13 percent and
15 January 2014-7.93 percent), not the 7.93 percent that Staff provided in its original
16 recommendation. Staff has attached its corrected Weighted Average Cost of Capital
17 recommendation as Schedule SA-2.

18 Q. What is Ms. Roth's primary concern regarding your recommended rate of
19 return (ROR) in this case?

20 A. Ms. Roth does not believe it is appropriate to allow an ROE for determining
21 rates for a utility that is in receivership because the owner has been replaced by a court
22 appointed receiver.

1 Q. Does Ms. Roth believe any revenues should be allowed for ROR for a utility
2 in receivership?

3 A. Yes. She does allow for interest on debt she believes the receiver prudently
4 incurred. However, she recommends that this rate only be applied to an amount of rate base
5 equal to that of the amount of debt incurred, which amounts to \$5,000 instead of the full
6 amount of rate base she recommends of approximately \$7,860.

7 Q. Is Staff aware of any cases in which the Commission decided the appropriate
8 approach for determining an allowed ROR for a utility in receivership?

9 A. No.

10 Q. What has been Staff's approach for recommending a ROR for utility
11 companies in receivership?

12 A. Staff has consistently recommended a hypothetical ROR based on a
13 hypothetical capital structure, cost of debt and cost of equity.

14 Q. Why does Staff believe this is appropriate?

15 A. Staff believes the ROR for a utility in receivership should be determined
16 based on a fair and reasonable estimate of the cost of capital for a going concern. It is Staff's
17 understanding that if a utility company in receivership should have excess funds remaining
18 after paying expenses and capital costs, these funds remain with the utility company.

19 Q. Does Hickory Hills Water & Sewer Company ("Company" or "Hickory
20 Hills") have excess funds?

21 A. No. Hickory Hills has been accumulating significant payables since it has
22 been in receivership.

1 Q. How did Staff estimate Hickory Hills' ROE?

2 A. Staff used its Small Utility ROE/ROR Methodology (attached as
3 Schedule SA-3) to estimate Hickory Hills' ROE. Staff's Small Utility Return on Equity
4 (ROE)/ Small Rate of Return (ROR) Methodology ("Small Company ROR Methodology")
5 has been considered by the Commission in the recent Lake Region rate case, Case No. WR-
6 2013-0461 and the Emerald Pointe rate case, Case Nos. SR-2013-0016 and WR-2013-0017.
7 Staff added a 4 percent risk premium to the 30-year, 'BB' rated public utility bond yield
8 average for November 2013, December 2013 and January 2014, which was 8.04 percent.
9 Consistent with Staff's Small Company ROR Methodology, Staff estimated Hickory Hills'
10 bond rating to be 'BB' by assigning a 'Satisfactory' Business Risk Profile (BRP) estimate
11 with an 'Aggressive' Financial Risk Profile (FRP) estimate. The 'Satisfactory' BRP was
12 based on the uncertainty of the Company's ability to attract debt capital through commercial
13 loans without having to pledge personal assets. The 'Aggressive' FRP was based on Staff's
14 recommended hypothetical capital structure's Debt/Capital ratio and comparing it to the
15 financial benchmark ratios in *Standard & Poor's* "Criteria Methodology: Business
16 Risk/Financial Risk Matrix Expanded." Adding 4 percent to this cost of debt results in a cost
17 of equity of 12.04 percent.

18 Q. How did Staff estimate the cost of debt?

19 A. Staff used the average of 'BB' rated 30 year public utility bonds for
20 November 2013, December 2013 and January 2014 to estimate Hickory Hills hypothetical
21 cost of debt. This public utility bond yield average equaled 8.04 percent.

1 Q. What capital structure did Staff use for purposes of applying the cost of equity
2 and the cost of debt?

3 A. Staff's recommended 12.04 percent ROE and cost of debt are based on a
4 hypothetical capital structure of 49.75 percent common equity and 50.25 percent long term
5 debt. Staff's hypothetical capital structure is based on the proxy group capital structure from
6 the most recent Missouri American rate case. Staff uses this hypothetical capital structure
7 and hypothetical cost of debt because it is unknown how the company in receivership will be
8 financed going forward.

9 Q. Does this conclude your rebuttal testimony?

10 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of a Requested Rate Increase for)	Case No. WR-2014-0167
Annual Water Operating Revenues by Hickory)	
Hills Water & Sewer)	and
In the Matter of a Requested Rate Increase for)	Case No. SR-2014-0166
Annual Sewer Operating Revenues by Hickory)	
Hills Water & Sewer)	

AFFIDAVIT OF SHANA ATKINSON

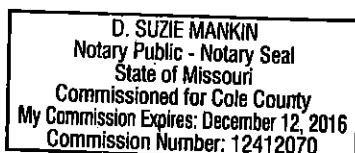
STATE OF MISSOURI)	
)	ss.
COUNTY OF COLE)	


Shana Atkinson, of lawful age, on her oath states: that she has participated in the preparation of the foregoing Rebuttal Testimony in question and answer form, consisting of 5 pages to be presented in the above case; that the answers in the foregoing Rebuttal Testimony were given by her; that she has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of her knowledge and belief.



Shana Atkinson

Subscribed and sworn to before me this 11th day of September, 2014.





Notary Public

SUMMARY OF CASE PARTICIPATION

SHANA ATKINSON

Date Filed	Issue	Case Number	Exhibit	Case Name
5/1/2014	Rate of Return Capital Structure	HR-2014-0066	Cost of Service Report	Veolia Energy Kansas City, Inc.
1/31/2014	Rate of Return Capital Structure	WR-2013-0461	Surrebuttal	Lake Region Water & Sewer Company
1/31/2014	Rate of Return Capital Structure	SR-2013-0459	Surrebuttal	Lake Region Water & Sewer Company
11/15/2013	Rate of Return Capital Structure	WR-2013-0461	Cost of Service Report	Lake Region Water & Sewer Company
11/15/2013	Rate of Return Capital Structure	SR-2013-0459	Cost of Service Report	Lake Region Water & Sewer Company
2/4/2013	Rate of Return Capital Structure	ER-2012-0345	Surrebuttal	Empire District Electric Company
1/16/2013	Rate of Return Capital Structure	ER-2012-0345	Rebuttal	Empire District Electric Company
11/30/2012	Rate of Return Capital Structure	ER-2012-0345	Cost of Service Report	Empire District Electric Company
8/20/2012	Rate of Return Capital Structure	ER-2012-0345	Interim Rebuttal	Empire District Electric Company
5/6/2011	Rate of Return Capital Structure	ER-2011-0004	True-Up Direct	Empire District Electric Company
4/28/2011	Rate of Return Capital Structure	ER-2011-0004	Surrebuttal	Empire District Electric Company

SUMMARY OF CASE PARTICIPATION

SHANA ATKINSON

Date Filed	Issue	Case Number	Exhibit	Case Name
4/18/2011	Rate of Return Capital Structure	ER-2011-0004	Rebuttal	Empire District Electric Company
2/23/2011	Rate of Return Capital Structure	ER-2011-0004	Cost of Service Report	Empire District Electric Company
4/23/2010	Rate of Return Capital Structure	ER-2010-0130	Surrebuttal	Empire District Electric Company
4/02/2010	Rate of Return Capital Structure	ER-2010-0130	Rebuttal	Empire District Electric Company
2/26/2010	Rate of Return Capital Structure	ER-2010-0130	Cost of Service Report	Empire District Electric Company
1/13/2010	Rate of Return Capital Structure	WR-2010-0111	Cost of Service Report	Lake Region Water & Sewer Company
1/13/2010	Rate of Return Capital Structure	SR-2010-0110	Cost of Service Report	Lake Region Water & Sewer Company
10/20/2009	Rate of Return Capital Structure	GR-2009-0434	Cost of Service Report	Empire District Gas Company

Hickory Hills Water & Sewer
SR-2014-0166 & WR-2014-0167

Weighted Cost of Capital
Hickory Hills Water & Sewer Company

Capital Component	Percentage of Capital	Cost	Weighted Cost of Capital Using Common Equity Return of: 12.04%
Common Stock Equity	49.75%	-----	5.99%
Long-Term Debt	50.25%	8.04%	4.04%
Total	<u>100.00%</u>		<u>10.03%</u>

Notes:

- Proxy Group Capital Structure from Missouri-American Case No. WR-2011-337
- Hypothetical Cost of Debt Based on recent 3-month (November 2013, December 2013 and January 2014) average yield of 30- year bonds with a BB rating.
- Return on equity is simply a 4% risk premium applied to the cost of debt.

Small Utility

Return on Equity (ROE)/Rate of Return (ROR)

Methodology

Prepared by

Financial Analysis Department
(Shana Atkinson, Zephania Marevangeo and David Murray)
Utility Services Division
Missouri Public Service Commission
September 2010
(updated in August 2011)

Hickory Hills Water & Sewer Company
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Financial Analysis Small Water and Sewer Return on Equity (ROE) Determination

Although the Financial Analysis (FA) Department's small water and sewer (W&S) rate case procedure had been premised on adding a range of risk premiums to the FA Department's cost of equity estimate in the most recent Missouri-American rate case, the FA Department decided to revise its generic procedure to allow cost of equity estimates for small water and sewer companies to be more responsive, current and specific than its old procedure. The FA Department's new procedure is based on a fairly generic risk premium methodology. Staff will apply a "standard" risk premium to a reasonable estimate of the current cost of debt for the subject company to arrive at an estimated cost of equity. Because small water and sewer companies typically don't issue debt that is actively traded, the FA Department must rely on its estimate of the subject company's credit rating and then determine a recent average cost of utility debt for this rating based on data the FA Department receives from its current source for utility debt yields, BondsOnline. The Department then adds the "standard" risk premium to this current cost of debt to estimate the cost of common equity. These capital costs are then applied to the appropriate weights in the capital structure to estimate a fair and reasonable rate of return.

Recommended Formula:

Recommended Return on Common Equity = Reuters Public Utility Bond Yield average of the past three months from BondsOnline + 3-4% risk premium.

This formula is based on the bond yield risk premium method for estimating the cost of equity. According to the textbook *Analysis of Equity Investments: Valuation* (2002) by John D. Stowe, Thomas R. Robinson, Jerald E. Pinto and Dennis W. McLeavey (used as part of the curriculum in the Chartered Financial Analyst Program), a typical risk premium added to the yield-to-maturity (YTM) of a company's long-term debt is in the 3 to 4 percent range. For purposes of estimating the cost of common equity for Missouri's larger electric, gas and water utilities, FA Staff believes at least the low end of this risk premium range is appropriate considering publicly-traded utility stocks exhibit investment characteristics very similar to bonds. Consequently, the low end of the risk premium estimate will be considered for companies that are not privately held or are subsidiaries of publicly-traded parent companies. However, the high end of the risk premium estimate may be used for privately owned small water and sewer companies that are not considered to be marketable from an acquisition standpoint.

Estimated Bond Rating:

In order to estimate the cost of debt for the subject company (assuming there is no current reasonable yield on the subject company's cost of debt), the FA Department must estimate the credit rating of the subject company. The FA Department's estimate of the subject company's credit rating will be restricted to credit ratings within the range of 'AAA' to 'B'. Because most regulated small water and sewer companies in Missouri do not issue debt either directly or indirectly (through a parent company), they do not have a published credit rating. Therefore, in such cases the FA Department will use the May

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27, 2009 Standard & Poor's ratings matrix as a guide to estimate the water and sewer utility's credit rating. This guide allows the FA Department to estimate a credit rating based on an assessment of the business and financial risks of the small water and sewer utility. Based on S&P data available for the water companies it rates, these companies have a financial risk profile ("FRP") no lower than "Aggressive" and business risk profiles ("BRP") of "Excellent."¹ Although S&P assigns an "Excellent" BRP to all of the water and sewer companies it rates, Staff believes that due to the fact that some small water and sewer companies have trouble receiving debt financing, this should be considered in assigning BRPs for purposes of estimating the cost of equity for small water and sewer companies. Staff will determine the BRP of a company by assessing the company's access or potential access to debt capital. If a company proves to Staff that they cannot obtain a loan or the company can obtain a loan but has to pledge personal assets in order to do so, then Staff would classify the company's BRP as "Satisfactory." If the company can obtain a commercial loan without having to pledge personal assets, then Staff would classify the company as having a "Strong" BRP. If a company or its parent can issue debt directly to capital providers, then Staff would classify the company as having an "Excellent" BRP. The FRP of a company will be estimated by determining the company's Debt/Capital ratio and comparing it to the following S&P's benchmark ratios:

Financial Risk Indicative Ratios (Corporates)

	Debt/Capital (%)
Minimal	less than 25
Modest	25-35
Intermediate	35-45
Significant	45-50
Aggressive	50-60
Highly Leveraged	greater than 60

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S&P's Business and Financial Risk Profile Matrix states that the ratings indicated in each cell of the matrix are the midpoints of a range of likely rating possibilities. This range would ordinarily span one notch above and below the indicated rating. For example, an "Aggressive" FRP and a "Strong" BRP is indicative of a 'BB' rating according to the matrix. The 'BB' rating is the midpoint, meaning the suggested range would be 'BB+' to 'BB-'. Staff will determine which indicative rating to use by evaluating the Debt/Capital ratio. For example, an "Aggressive" FRP has a Debt/Capital ratio of 50%-60% according to the financial risk indicative ratios. Staff would divide the 50%-60% into thirds to represent 3 notches in the range. Therefore, using an "Aggressive" FRP and a "Strong"

¹ "Excellent" is considered to be the least risky of all of S&P's business risk profiles.

² S&P RatingsDirect, May 27, 2009, "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded" (Attachment A).

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BRP as an example, the midpoint of 'BB' may be represented by a Debt/Capital ratio of 53.33%-56.66%, 'BB+' may be represented by a Debt/Capital ratio of 50.00%-53.32% and 'BB-' may be represented by a Debt/Capital ratio of 56.67% - 60%.

Capital Structure Determination:

In situations in which a small water and sewer utility has debt capital in excess of 75%, the FA Department believes it is appropriate to use a hypothetical capital structure that limits debt to 75% of total capital. Although it could be argued that Staff should also use a hypothetical capital structure if a company's capital structure is not cost efficient due to a high equity ratio, the FA Department decided not to limit the amount of equity in the capital structure. If a company shows that its capital structure consists of more than 75% debt, then a hypothetical capital structure of 75% debt and 25% equity will be assumed. For all situations wherein a small water and sewer company has debt capital less than 75%, the company's actual capital structure will be used in determining the company's ROR. Assuming the company's current cost of debt is reasonable for a hypothetical capital structure of 75% debt and 25% equity, Staff may use this current cost of debt. If the company's current cost of debt is unreasonable due to over use of leverage, Staff may use a hypothetical cost of debt.

The FA Department will rely on the company's financial statements to estimate the ratemaking capital structure if these financial statements provide an accurate and reliable representation of the capital that supports the company's investment in the utility's assets. However, if a company's rate base is not consistent with the carrying value of the assets in the financial statements, Staff will impute the rate base number as plant and subtract the amount of debt from rate base to estimate the amount of equity in the capital structure.

Cost of Common Equity:

The Department recognizes that the estimation of the cost of common equity for a utility is not an exact science. Therefore, the Department will recommend a reasonable ROE range based on the specific circumstances of each case. For example, absent specific circumstances, the Department usually recommends an ROE range of no more than 100 basis points in major rate cases. Staff may recommend the higher end of its range if the company is privately held and not marketable. Staff may recommend the low end of its range if the water and sewer operations are owned by a larger parent company that is publicly-traded or the company is considered to be marketable from an acquisition perspective.

Disclaimer:

This procedure may be subject to change at any time based on Staff's research on other approaches to address small water and sewer ROE recommendations and the availability

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of additional and/or better resources that may allow for improvement to the determination of appropriate rates of return for small water and sewer.

Examples:

75.00% to 100% Equity: According to Table 1 in the May 27, 2009 S&P report, this is indicative of a “Minimal” FRP. Depending on the BRP, the benchmark credit rating could be anywhere from ‘AAA’ to ‘A-’.

65.00% to 74.99% Equity: According to Table 1 in the May 27, 2009 S&P report, this is indicative of a “Modest” FRP. Depending on the BRP, the benchmark credit rating could be anywhere from ‘AA’ to ‘BBB+’.

55.00% to 64.99% Equity: According to Table 1 in the May 27, 2009 S&P report, this is indicative of a “Intermediate” FRP. Depending on the BRP, the benchmark credit rating could be anywhere from ‘A’ to ‘BBB’.

50.00% to 54.99% Equity: According to Table 1 in the May 27, 2009 S&P report, this is indicative of a “Significant” FRP. Depending on the BRP, the benchmark credit rating could be anywhere from ‘A-’ to ‘BB+’.

40.00% to 49.99% Equity: According to Table 1 in the May 27, 2009 S&P report, this is indicative of a “Aggressive” FRP. Depending on the BRP, the benchmark credit rating could be anywhere from ‘BBB’ to ‘BB-’.

25.00% to 39.99% Equity: According to Table 1 in the May 27, 2009 S&P report, this is indicative of a “Highly Leveraged” FRP. Depending on the BRP, the benchmark credit rating could be anywhere from ‘BB-’ to ‘B+’.

Case Example for WACC Recommendation

Test year of Dec. 31, 200X for this case indicates the following regarding capital structure:

XYZ Sewer Systems, Inc
12/31/200X

Common Stock	\$47,056	40%
Debt	\$70,584	60%
Total Capital	\$117,640	100%

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Most of the time the amount of common stock will be broken down by par value of common stock, other paid in capital and retained earnings. One should make sure to include all components of common equity in this balance.

Debt Issuance	Amount	Cost	Percent	Weighted Cost of Debt
N/P United Bank of Union	\$44,007.08	6.25%	62.34%	3.90%
N/P Jane Doe Corp.	\$23,276.92	5.50%	32.98%	1.81%
N/P Doe Construction, Inc.	<u>\$ 3,300.00</u>	5.50%	<u>4.68%</u>	<u>0.26%</u>
	\$70,584.00		100.00%	5.97%

As you can see, the weighted cost of debt is figured the same as the overall weighted cost of capital. Based on the S&P ratings matrix the company has an “Aggressive” FRP and based on the company’s ability to obtain a commercial loan from United Bank of Union, the BRP is considered “Strong”. Based on Staff’s determination of an “Aggressive” FRP and a “Strong” BRP, XYZ Sewer Systems credit profile is indicative of a ‘BB-’ rating.

Now that we have an estimated credit rating we need to determine a current yield on debt of the same rating. Staff currently obtains such data through its subscription to BondsOnline. Because yields can fluctuate from month-to-month, Staff believes it is appropriate to use a 3-month average yield. Staff uses 30-year utility bond yields because it is assumed that utility stock investors’ required returns are closely tied to required returns for long-term bond investments.

Although the following example is only based on the debt yield for one month, May 2011, simply use the same methodology for the other two months and average the 3 yields to determine the appropriate reference yield.

Based on the methodology discussed above, the risk premium would be added to the reference yield consistent with a ‘BB-’ rating for a 30-year bond, which is $4.29\% + 3.71\% = 8.00\%$ (see table below). Because the company is a privately-owned enterprise that doesn’t issue its own debt or its parent company doesn’t issue debt, you add a 4% risk premium to arrive at a cost of equity recommendation of 12%.

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Reuters Corporate Spreads for Utilities
May 2011 Average

Rating	1 yr	2 yr	3 yr	5 yr	7 yr	10 yr	30 yr
Aaa/AAA	13	20	22	27	29	36	39
Aa1/AA+	22	28	32	37	69	74	79
Aa2/AA	27	32	37	47	77	79	84
Aa3/AA-	28	39	53	58	85	90	95
A1/A+	32	42	56	77	93	103	114
A2/A	37	47	62	87	104	109	116
A3/A-	47	57	82	97	114	119	129
Baa1/BB	77	82	97	122	119	124	159
B+							
Baa2/BB	95	102	122	142	149	154	179
B							
Baa3/BB	97	117	127	147	159	164	194
B-							
Ba1/BB+	101	121	131	151	161	181	216
Ba2/BB	121	146	161	191	201	231	271
Ba3/BB-	131	156	166	196	231	351	371
B1/B+	166	171	191	271	286	381	441
B2/B	171	201	296	371	421	511	641
B3/B-	191	346	471	571	621	676	761
Caa/CCC	366	471	572	636	646	761	861
+							
US	0.19	0.56	0.94	1.84	2.51	3.17	4.29
Treasury							
Yield							

XYZ Sewer Systems, Inc.
Cost of Capital as of 12/31/200X

Capital Component	Amount	%Capital	Cost	Weighted Cost
Common equity	\$ 47,056	40.00%	12.00%	4.80%
Long-term debt	\$ 70,584	60.00%	5.97%	3.58%
	\$117,640	100.00%		8.38%