

Exhibit No.:
Issue(s): Capital Structure
Witness: Matthew J. Barnes
Sponsoring Party: MoPSC Staff
Type of Exhibit: Rebuttal Testimony
Case No.: WR-2017-0259
Date Testimony Prepared: October 27, 2017

MISSOURI PUBLIC SERVICE COMMISSION

COMMISSION STAFF DIVISION

WATER AND SEWER DEPARTMENT

REBUTTAL TESTIMONY

OF

MATTHEW J. BARNES

INDIAN HILLS UTILITY OPERATING COMPANY, INC.

CASE NO. WR-2017-0259

Jefferson City, Missouri
October 2017

Rebuttal Testimony of
Matthew J. Barnes

1 A. Mr. Gorman and Staff used an embedded cost of debt of 6.75% and 14%,
2 respectively.

3 Q. Why did Staff use 14%?

4 A. Staff agreed to the 14.00% as part of the partial disposition agreement filed
5 earlier in the case.

6 Q. What is the difference between the ROR resulting from Staff's capital structure
7 (65% debt/35% equity) and Mr. Gorman's capital structure (50% debt/50% equity), assuming
8 the Commission adopts a cost of debt of 14%?

9 A. Rate of return would decrease by 0.70% or 70 basis points. Staff's filed ROR
10 is 12.37% and using OPC's capital structure and a cost of debt of 14% yields an ROR of
11 11.67%. Please see Schedules MJB-r2 and MJB-r3 that show the respective ROR
12 calculations.

13 Q. What is the difference between the ROR resulting from Staff's capital structure
14 (65% debt/35% equity) and Mr. Gorman's capital structure (50% debt/50% equity) assuming
15 the Commission adopts Mr. Gorman's proposed cost of debt of 6.75%?

16 A. Rate of return would increase by 0.39% or 39 basis points. Using Staff's
17 capital structure and OPC's cost of debt results in and ROR of 7.66% compared to OPC's
18 recommendation which results in an ROR of 8.05%. Please see Schedule MJB-r4 and
19 MJB-r5 that show the respective ROR calculations.

20 Q. What is the impact on rates based on the various scenarios?

21 A. First, Staff calculated the cost of service for the four scenarios.

- 22 • The first scenario is Staff's filed position with a 14% cost of
23 debt and 65% debt/35% equity capital structure. The cost of
24 service is \$649,031, which is an increase of 572% in overall
25 revenues.

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- The second scenario is Staff's 14% cost of debt and OPC's 50% debt/50% equity capital structure. The cost of service is \$652,957, which is an increase of 576% in overall revenues.
- The third scenario is OPC's cost of debt of 6.75% and Staff's 65% debt/35% equity capital structure. The cost of service is \$560,440, which is an increase of 481% in overall revenues.
- The final scenario is OPC's cost of debt of 6.75% and OPC's 50% debt/50% equity capital structure. The cost of service is \$584,803, which is an increase of 506% in overall revenues.

Based on those numbers, here is a table showing the impact on rates:

Scenario	Customer Charge	Commodity Charge	Average Bill (3,000 gallons)
14% cost of debt – 65% debt/35% equity	\$52.04	\$7.87	\$75.64
14% cost of debt – 50% debt/50% equity	\$53.33	\$7.59	\$76.10
6.75% cost of debt - 65% debt/35% equity	\$45.85	\$6.49	\$65.32
6.75% cost of debt - 50% debt/50% equity	\$48.56	\$6.53	\$68.16

Q. Does this conclude your testimony?

A. Yes.

MATTHEW J. BARNES

EDUCATION AND RATE CASE PARTICIPATION

Educational and Employment Background and Credentials

I am a Utility Regulatory Auditor IV in the Water and Sewer Department, Commission Staff Division for the Missouri Public Service Commission. I was promoted to Utility Regulatory Auditor IV in the Energy Resources Department, Commission Staff Division for the Missouri Public Service Commission in June 2008. I accepted the position of Utility Regulatory Auditor I/II/III in June 2003. I transferred to the position of Utility Regulatory Auditor IV in the Water and Sewer Department in June 2016.

In December 2002, I earned a Bachelor of Science Degree in Business Administration with an Emphasis in Accounting from Columbia College. In May 2005, I earned a Master's in Business Administration with an Emphasis in Accounting from William Woods University.

RATE CASE PARTICIPATION

Date Filed	Issue	Case Number	Exhibit	Case Name
09/08/2004	Merger with TXU Gas	GM20040607	Staff Recommendation	Atmos Energy Corporation
10/15/2004	Rate of Return	TC20021076	Supplemental Direct	BPS Telephone Company
06/28/2005	Finance Recommendation	EF20050387	Staff Recommendation	Kansas City Power and Light Company
06/28/2005	Finance Recommendation	EF20050388	Staff Recommendation	Kansas City Power and Light Company
08/31/2005	Finance Recommendation	EF20050498	Staff Recommendation	Kansas City Power and Light Company
11/15/2005	Spin-off of landline operations	IO20060086	Rebuttal	Sprint Nextel Corporation

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EDUCATION AND RATE CASE PARTICIPATION

03/08/2006	Spin-off of landline operations	TM20060272	Rebuttal	Alltel Missouri, Inc.
08/08/2006	Rate of Return	ER20060314	Direct	Kansas City Power & Light Company
09/08/2006	Rate of Return	ER20060314	Rebuttal	Kansas City Power & Light Company
09/13/2006	Rate of Return	GR20060387	Direct	Atmos Energy Corporation
10/06/2006	Rate of Return	ER20060314	Surrebuttal	Kansas City Power & Light Company
11/07/2006	Rate of Return	ER20060314	True-Up Direct	Kansas City Power & Light Company
11/13/2006	Rate of Return	GR20060387	Rebuttal	Atmos Energy Corporation
11/23/2006	Rate of Return	GR20060387	Surrebuttal	Atmos Energy Corporation
12/01/2006	Rate of Return	WR20060425	Direct	Algonquin Water Resources of Missouri LLC
12/28/2006	Rate of Return	WR20060425	Rebuttal	Algonquin Water Resources of Missouri LLC
01/12/2007	Rate of Return	WR20060425	Surrebuttal	Algonquin Water Resources of Missouri LLC
02/07/2007	Finance Recommendation	GF20070220	Staff Recommendation	Laclede Gas Company

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EDUCATION AND RATE CASE PARTICIPATION

05/04/2007	Rate of Return	GR20070208	Direct	Laclede Gas Company
07/24/2007	Rate of Return	ER20070291	Direct	Kansas City Power and Light Company
08/30/2007	Rate of Return	ER20070291	Rebuttal	Kansas City Power and Light Company
09/20/2007	Rate of Return	ER20070291	Surrebuttal	Kansas City Power and Light Company
11/02/2007	Rate of Return	ER20070291	True-up Direct	Kansas City Power and Light Company
02/01/2008	Finance Recommendation	EF20080214	Staff Recommendation	Kansas City Power and Light Company
02/22/2008	Rate of Return	ER20080093	Cost of Service Report	The Empire District Electric Company
04/04/2008	Rate of Return	ER20080093	Rebuttal Testimony	The Empire District Electric Company
04/25/2008	Rate of Return	ER20080093	Surrebuttal Testimony	The Empire District Electric Company
08/18/2008	Rate of Return	WR20080311	Cost of Service Report	Missouri-American Water Company
09/30/2008	Rate of Return	WR20080311	Rebuttal Testimony	Missouri-American Water Company
10/16/2008	Rate of Return	WR2008031	Surrebuttal Testimony	Missouri-American Water Company

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EDUCATION AND RATE CASE PARTICIPATION

02/26/2010	Fuel Adjustment Clause	ER20100130	Cost of Service Report	The Empire District Electric Company
04/02/2010	Fuel Adjustment Clause	ER20100130	Rebuttal Testimony	The Empire District Electric Company
04/23/2010	Fuel Adjustment Clause	ER20100130	Surrebuttal Testimony	The Empire District Electric Company
02/23/11	Fuel Adjustment Clause	ER20110004	Cost of Service Report	The Empire District Electric Company
04/22/11	Fuel Adjustment Clause	ER20110004	Rebuttal Testimony	The Empire District Electric Company
04/28/11	Fuel Adjustment Clause	ER20110004	Surrebuttal Testimony	The Empire District Electric Company
05/06/11	Fuel Adjustment Clause	ER20110004	True-up Direct Testimony	The Empire District Electric Company
10/21/11	Costs for the Phase-In Tariffs	ER20120024	Direct Testimony	KCP&L Greater Missouri Operations Company
11/17/11	Rate of Return	WR20110337	Cost of Service Report	Missouri-American Water Company
08/09/12	Fuel Adjustment Clause	ER20120175	Staff Report	KCP&L Greater Missouri Operations Company
09/12/12	Fuel Adjustment Clause	ER20120175	Rebuttal Testimony	KCP&L Greater Missouri Operations Company
10/10/12	Fuel Adjustment Clause	ER20120175	Surrebuttal Testimony	KCP&L Greater Missouri Operations Company
11/30/12	Fuel Adjustment Clause	ER20120345	Cost of Service Report	The Empire District Electric Company

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EDUCATION AND RATE CASE PARTICIPATION

12/13/14	Fuel Adjustment Clause	ER20120345	Class Cost of Service Report	The Empire District Electric Company
01/16/13	Fuel Adjustment Clause	ER20120345	Rebuttal Testimony	The Empire District Electric Company
02/14/13	Fuel Adjustment Clause	ER20120345	Surrebuttal Testimony	The Empire District Electric Company
12/05/14	Fuel Adjustment Clause	ER20140258	Cost of Service Report	Ameren Missouri
12/19/14	Fuel Adjustment Clause	ER20140258	Class Cost of Service Report	Ameren Missouri
01/16/15	Fuel Adjustment Clause	ER20140258	Rebuttal Testimony	Ameren Missouri
02/06/15	Fuel Adjustment Clause	ER20140258	Surrebuttal Testimony	Ameren Missouri
03/17/15	Fuel Adjustment Clause	ER20140258	True-up Direct Testimony	Ameren Missouri
07/15/16	Fuel Adjustment Clause	ER20160156	Staff Report Revenue Requirement Cost of Service	KCP&L Greater Missouri Operations Company
07/29/16	Fuel Adjustment Clause	ER20160156	Staff Report Rate Design	KCP&L Greater Missouri Operations Company
10/13/16	Rate of Return	SR20160202	Rebuttal Testimony	Raccoon Creek Utility Operating Company

Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Capital Structure Schedule - Water

Line Number	A Description	B Dollar Amount	C Percentage of Total Capital Structure	D Embedded Cost of Capital	E Weighted Cost of Capital
1	Common Stock	\$643,298	35.00%	9.34%	3.269%
2	Other Security-Non Tax Deductible	\$0	0.00%	0.00%	0.000%
3	Preferred Stock	\$0	0.00%	0.00%	0.000%
4	Long Term Debt	\$1,194,699	65.00%	14.00%	9.100%
5	Short Term Debt	\$0	0.00%	0.00%	0.000%
6	Other Security-Tax Deductible	\$0	0.00%	0.00%	0.000%
7	TOTAL CAPITALIZATION	<u>\$1,837,997</u>	<u>100.00%</u>		<u>12.369%</u>

To PreTax Return Rate Schedule

Note: column C: is 6 positions with 4 that are displayed (if not totaled correctly, due to rounding)

Schedule MJB-r2

Accounting Schedule: 04

Sponsor: Staff

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Indian Hills Utility Operating Company, Inc.

Case No.

WR-2017-0259

Test Year Ending March 31, 2017

Capital Structure Schedule - Water

Line Number	A Description	B Dollar Amount	C Percentage of Total Capital Structure	D Embedded Cost of Capital	E Weighted Cost of Capital
1	Common Stock	\$918,998	50.00%	9.34%	4.670%
2	Other Security-Non Tax Deductible	\$0	0.00%	0.00%	0.000%
3	Preferred Stock	\$0	0.00%	0.00%	0.000%
4	Long Term Debt	\$918,998	50.00%	14.00%	7.000%
5	Short Term Debt	\$0	0.00%	0.00%	0.000%
6	Other Security-Tax Deductible	\$0	0.00%	0.00%	0.000%
7	TOTAL CAPITALIZATION	\$1,837,996	100.00%		11.670%

To PreTax Return Rate Schedule

Note: column C: is 6 positions with 4 that are displayed (if not totaled correctly, due to rounding)

Schedule MJB-r3

Accounting Schedule: 04

Sponsor: Staff

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Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Capital Structure Schedule - Water

Line Number	A Description	B Dollar Amount	C Percentage of Total Capital Structure	D Embedded Cost of Capital	E Weighted Cost of Capital
1	Common Stock	\$643,298	35.00%	9.34%	3.269%
2	Other Security-Non Tax Deductible	\$0	0.00%	0.00%	0.000%
3	Preferred Stock	\$0	0.00%	0.00%	0.000%
4	Long Term Debt	\$1,194,699	65.00%	6.75%	4.388%
5	Short Term Debt	\$0	0.00%	0.00%	0.000%
6	Other Security-Tax Deductible	\$0	0.00%	0.00%	0.000%
7	TOTAL CAPITALIZATION	<u>\$1,837,997</u>	<u>100.00%</u>		<u>7.657%</u>

To PreTax Return Rate Schedule

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Indian Hills Utility Operating Company, Inc.
Case No.
WR-2017-0259
Test Year Ending March 31, 2017
Capital Structure Schedule - Water

Line Number	A Description	B Dollar Amount	C Percentage of Total Capital Structure	D Embedded Cost of Capital	E Weighted Cost of Capital
1	Common Stock	\$918,998	50.00%	9.34%	4.670%
2	Other Security-Non Tax Deductible	\$0	0.00%	0.00%	0.000%
3	Preferred Stock	\$0	0.00%	0.00%	0.000%
4	Long Term Debt	\$918,998	50.00%	6.75%	3.375%
5	Short Term Debt	\$0	0.00%	0.00%	0.000%
6	Other Security-Tax Deductible	\$0	0.00%	0.00%	0.000%
7	TOTAL CAPITALIZATION	<u>\$1,837,996</u>	<u>100.00%</u>		<u>8.045%</u>

To PreTax Return Rate Schedule

Note: column C: is 6 positions with 4 that are displayed (if not totaled correctly, due to rounding)