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Exhibit No. 100

Staff – Exhibit 100
Clark
Direct
File No. WR-2023-0344

Exhibit No.:
Issue(s): Rate Design
Witness: Melanie Clark
Sponsoring Party: MoPSC Staff
Type of Exhibit: Direct Testimony
Case No.: WR-2023-0344
Date Testimony Prepared: October 10, 2023

MISSOURI PUBLIC SERVICE COMMISSION

INDUSTRY ANALYSIS DIVISION

WATER, SEWER & STEAM DEPARTMENT

DIRECT TESTIMONY

OF

MELANIE CLARK

THE RAYTOWN WATER COMPANY

CASE NO. WR-2023-0344

Jefferson City, Missouri
October 2023

DIRECT TESTIMONY OF
MELANIE CLARK
THE RAYTOWN WATER COMPANY
CASE NO. WR-2023-0344

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4
5 Q. Please state your name and business address.

6 A. My name is Melanie Clark and my business address is 200 Madison Street,
7 P.O. Box 360, Jefferson City, Missouri 65102.

8 Q. By whom are you employed and in what capacity?

9 A. I am employed by the Missouri Public Service Commission (“Commission”) as
10 a Lead Senior Utility Regulatory Auditor in the Water, Sewer, & Steam Department, Industry
11 Analysis Division.

12 Q. Please describe your educational background and work experience.

13 A. I graduated from Columbia College in April 2020 with a Master’s of Business
14 Administration Degree with an emphasis in Accounting. Prior to accepting my current position
15 with the Commission in October of 2022, I was employed by the Missouri Department of Social
16 Services as an Accountant Supervisor from September 2020 to October 2022, where one of my
17 duties was to assure compliance with grant laws and regulations.

18 Q. What is the purpose of this direct testimony?

19 A. The purpose of this direct testimony is to provide the Commission with Staff’s
20 (“Staff”) recommended rate design for The Raytown Water Company (“Raytown”) rate case.

21 Q. What is the purpose of Staff’s rate design?

22 A. The purpose is to design rates that are just and reasonable, and can be utilized
23 by a company to collect the total revenue requirement. Staff seeks to maintain predictability for

1 customers where possible and avoid rate shocks, while also maintaining an opportunity for the
2 company to remain financially stable, and continue to provide safe and adequate service.

3 Q. What is the current rate structure?

4 A. The rate structure currently consists of a fixed monthly customer charge and a
5 commodity (usage) charge.

6 Q. Is Staff proposing to change the current rate structure?

7 A. No. Staff believes the current rate structure is appropriate for Raytown.

8 Q. How did Staff develop the proposed customer charge?

9 A. The customer charge was developed using costs that are generally considered
10 fixed, and used primarily to serve a particular customer (such as meters and service lines), and
11 the number of customers. These 'fixed' costs do not generally vary by how much water a
12 company produces or sells.

13 Q. How did Staff develop the proposed commodity charges?

14 A. Commodity charges are generally composed of costs that vary with water
15 production, such as electricity for pumping, chemical use, etc. As these costs vary with usage,
16 the customer charge will vary to appropriately covers these costs. Staff believes the proposed
17 commodity charge effectively recovers the variable costs.

18 Q. How did Staff design its proposed rates?

19 A. Staff's rate design for Raytown's water operations is based on the revenue
20 requirement developed by Staff's Auditing Department. This revenue requirement is
21 \$4,309,019, an increase of \$1,174,782. After applying the general principles discussed
22 previously, Staff reviews the resulting rates and may make adjustments that are reasonable.
23 Staff's results of proposed reasonable rates are provided in Schedule MC-d2, attached to this

Direct Testimony of
Melanie Clark

1 testimony. For further details on the revenue requirement please see the direct testimony of
2 Staff witness Keith D. Foster.

3 Q. What are the current rates for Raytown?

4 A. Raytown currently has a customer charge for its water utility systems ranging
5 from \$12.86 to \$178.31, based on meter size. For an average residential customer on a 5/8"
6 meter, the customer charge is \$12.86. The commodity charge per 1,000 gallons of water used
7 is \$8.08.

8 Q. Did Staff perform a Class Cost of Study (CCOS) in this rate case?

9 A. No, the commercial and residential consumers have the same cost of service.
10 There is no additional treatment or distribution equipment to support the commercial customers,
11 and there are no unique costs to Raytown to service the existing commercial customers.
12 Therefore, only one customer class exists, and it is not necessary to complete a CCOS in
13 this case.

14 Q. What will be the impact to a typical residential customer under Staff's proposal?

15 A. A typical residential customer will see an increase of \$13.59. The customer
16 charge on a 5/8" meter will increase from \$12.86 to \$20.53, and the commodity charge will
17 increase from \$8.08 to \$9.56. A customer with a 5/8" meter using 4,000 gallons of water per
18 day will see their bill increase from \$45.18 to \$58.77.

19 Q. Did Staff and Raytown reach an agreement on the rates?

20 A. Yes, Raytown is in agreement with Staff that these rates are reasonable and
21 appropriate to collect the agreed upon revenue requirement.

22 Q. Does this conclude your direct testimony?

23 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI


In the Matter of the Application of a Rate)
Increase of Raytown Water Company) Case No. WR-2023-0344

AFFIDAVIT OF MELANIE CLARK

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW MELANIE CLARK and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Direct Testimony of Melanie Clark*; and that the same is true and correct according to her best knowledge and belief.

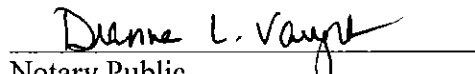
Further the Affiant sayeth not.



MELANIE CLARK

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 10th day of October 2023.



Notary Public

DIANNA L. VAUGHT
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: July 18, 2027
Commission Number: 15207377

Melanie Clark

Present Position:

I am a Lead Senior Utility Regulatory Auditor, Water, Sewer, and Steam Department, Industrial Analysis Division of the Missouri Public Service Commission. As a Lead Senior Utility Regulatory Auditor, my duties include managing cases before the Commission for the Water, Sewer, and Steam Department, creating rate design and class cost of service studies, and I conduct research and analysis of the financial aspects of public utility operations.

Educational Credentials and Work Experience:

I completed an Associate in Science in Business Administration from Columbia College in 2016. In April 2018, I earned my Bachelors of Science in Business Administration majoring in Accounting and Finance with a minor in Management from Columbia College. Finally in April 2020, I completed the MBA program with an emphasis in Accounting from Columbia College. I have worked in finance, auditing, and governmental accounting with over 15 years of experience.

Case Participation:

Company Name	Case Number(s)	Testimony/Issues
Missouri American Water Company	WA-2023-0345	Acquisition of Wood Heights
Missouri American Water Company	WO-2023-0008	WSIRA Recommendation
Evergy Missouri West	HT-2022-0284	QCA Rate Filing
Vicinity Kansas City, Inc.	HT-2023-0247	PACC Rate Filing
Evergy Missouri West	HT-2023-0360	QCA Rate Filing
Evergy Missouri West	HO-2023-0357	Prudence Review

THE RAYTOWN WATER COMPANY
Rate Making Income Statement-Water

Operating Revenues at Current Rates	
Tariffed Rate Revenues *	\$ 3,884,609
Other Operating Revenues *	\$ 424,412
Total Operating Revenues	\$ 4,309,019

* See "Revenues - Current Rates" for Details

Account No.	Cost of Service	Amount
	Item	
602.000	Purchased Water	\$ 1,396,830
660.000	Operation Supervision & Engineering - TDE	\$ 85,485
662.000	Transmission & Distribution Lines Expenses	\$ 48,616
663.000	Meter Expenses - TDE	\$ 536
672.000	Maint. of Dist. Reservoirs & Standpipes - TDE	\$ 29,512
673.000	Maint. of Transmission & Distribution Mains	\$ 490,641
675.000	Maint. of Services - TDE	\$ 4,584
676.000	Maint. of Meters - TDE	\$ 5,254
677.000	Maint. of Hydrants - TDE	\$ 1,318
902.000	Meter Reading Expenses - CAE	\$ 170,755
903.000	Customer Records & Collection Expenses	\$ 318,392
904.000	Uncollectible Amounts - CAE	\$ 19,648
907.000	Safety Meeting / Safety Equipment	\$ 63,686
920.000	Admin. & General Salaries	\$ 292,954
921.000	Office Supplies & Expenses	\$ 219,075
921.100	ROW Permits	\$ 39,125
922.000	Admin. Expenses Transferred - Credit	\$ (81,821)
923.000	Outside Services Employed	\$ 282,424
923.500	Main GIS Mapping	\$ (1,717)
924.000	Property Insurance	\$ 68,100
925.000	Injuries & Damages	\$ 26,814
926.000	Employee Pensions & Benefits	\$ 344,617
928.000	Regulatory Commission Expenses	\$ 45,475
930.210	Board Reports & Directives	\$ 4,494
930.200	Misc. General Expenses	\$ 29,667
930.300	R & D Expenses (Education)	\$ 13,685
930.400	Pre-Employment Drug Screening	\$ 1,960
932.000	Maint. of General Plant - AGE	\$ 37,014
403.000	Depreciation Expense, Dep. Exp.	\$ 599,613
0.000	Plastic Meters Depreciation Offset	\$ (29,288)
421.000	Amortization of CIAC	\$ (18,131)
431.100	Interest on Customer Deposits	\$ 14,794
431.200	Other Penalty / Interest Expense	\$ 938
471.270	Trash Bag Expense	\$ 3,862

403.000	EIERA Issuance Costs	\$	7,662
408.100	Property Taxes	\$	144,427
408.000	Employer FICA/FUTA/SUTA	\$	80,063
Sub-Total Operating Expenses		\$	4,761,063
0.000	Current Income Taxes	\$	(177,703)
0.000	Deferred Income Taxes - Def. Inc. Tax	\$	28,382
0.000	Additional Current Tax Required	\$	280,070
934.000	Amortization of 2018 Deferred Tax (TCJA)	\$	(29,939)
Sub-Total Taxes		\$	100,810
	Interest on Long-Term Debt ¹	\$	130,220
	Interest on Preferred Stock ²	\$	44,077
	Return on Equity ³	\$	447,631
Sub-Total Long-Term Debt & Return On Equity		\$	621,928
Total Cost of Service		\$	5,483,801
Overall Revenue Increase Needed		\$	1,174,782

¹ Rate Base x Cost of Long-term Debt

² Rate Base x Cost of Preferred Stock

³ Rate Base x Cost of Equity (Mid-point)

Rate Base	\$	9,144,649
Cost of Long-Term Debt		1.424%
Cost of Preferred Stock		0.482%
Cost of Equity		4.895%

THE RAYTOWN WATER COMPANY

Revenue Annualizations at Current Rates-Water

Annualized Customer Counts and Customer Charge Revenues

Residential Metered Customers

Meter Size	Residential	Rate *	Annual Revenue
5/8"	6,083	\$ 12.86	\$ 938,729
1"	80	\$ 23.33	\$ 22,397
1.5"	14	\$ 40.54	\$ 6,811
2"	26	\$ 61.24	\$ 19,107
3"	9	\$ 109.46	\$ 11,822
4"	1	\$ 178.31	\$ 2,140
Total	6,213		\$ 1,001,006

*Monthly Service Charge

Commercial Metered Customers

Meter Size	Commercial	Rate *	Annual Revenue
5/8"	242	\$ 12.86	\$ 37,345
1"	74	\$ 23.33	\$ 20,717
1.5"	27	\$ 40.54	\$ 13,135
2"	39	\$ 61.24	\$ 28,660
3"	2	\$ 109.46	\$ 2,627
4"	0	\$ 178.31	\$ -
Total	384		\$ 102,484

*Monthly Service Charge

Annualized Commodity Sales - Volumes and Revenues

Residential Commodity Sales

Meter Size	Residential	Rate	Annual Revenue
5/8"	25,548,600	\$ 8.08	\$ 2,064,327
1"	1,440,000	\$ 8.08	\$ 116,352
1.5"	221,200	\$ 8.08	\$ 17,873
2"	1,549,600	\$ 8.08	\$ 125,208
3"	1,249,200	\$ 8.08	\$ 100,935
4"	326,700	\$ 8.08	\$ 26,397
Total	30,335,300		\$ 2,451,093

*Volumes adjusted as needed per net revenue annualization at current rates.

Commercial Commodity Sales

Meter Size	Commercial	Rate	Annual Revenue
5/8"	1,040,600	\$ 8.08	\$ 84,080
1"	540,200	\$ 8.08	\$ 43,648
1.5"	496,800	\$ 8.08	\$ 40,141
2"	1,696,500	\$ 8.08	\$ 137,077
3"	68,600	\$ 8.08	\$ 5,543
4"	-	\$ 8.08	\$ -
Total	3,842,700		\$ 310,490

*Volumes adjusted as needed per net revenue annualization at current rates.

Private Fire Hydrants and Automatic Sprinkler Systems Annual Charge

Code	Number of Hydrants/Lines	Meter Size	# of Customers	Tariff Rate	Annual Per Customer	Annual Customer Charge
<i>Fire Hydrants and Automatic Sprinkler Systems</i>						
FA (500)	1	PVT F Hyd/F Lines	35	\$ 236.17	\$ 236.17	\$ 8,266
FB (501)	2	PVT F Hyd/F Lines	16	\$ 236.17	\$ 472.34	\$ 7,557
FC (502)	3	PVT F Hyd/F Lines	1	\$ 236.17	\$ 708.51	\$ 709
FD (503)	4	PVT F Hyd/F Lines	0	\$ 236.17	\$ 944.68	\$ -
FE (504)	1	4" F/Line Standpipe	4	\$ 112.10	\$ 112.10	\$ 448
FF (505)	1	8" F/Line Standpipe	3	\$ 425.08	\$ 425.08	\$ 1,275
			59			\$ 18,256
FG (506)	2	F/H-1ea. 4",6 PVT F Hyd/F Lines		\$ 211.48	\$ 422.96	\$ 423
	1	4" F/Line Standpipe		\$ 112.10	\$ 112.10	\$ 112
	1	6" F/Line Standpipe		\$ 236.17	\$ 236.17	\$ 236
	1	8" F/Line Standpipe	1	\$ 425.08	\$ 425.08	\$ 425
FH (507)		< or = 2" F/Line Standpipe	3	\$ 28.18	\$ 28.18	\$ 85
		10" Standpipe		\$ 717.52	\$ 717.52	\$ -
TOTALS			63			\$ 1,281
Total Fire						\$ 19,536

Other Operating Revenues

Late Charges	\$ 93,090
Metered Sales of Bulk Water	\$ 5,716
NSF Checks - Charges	\$ 2,315
Off/On During Hours	\$ 79,690
KC Public Water Sales Revenue	\$ 8,904
Antenna Rents Revenue	\$ 166,505
Discounts Earned	\$ 2,807
Trash Bags Revenue	\$ 5,664
9820 Building Revenue	\$ -
Multi Other Miscellaneous	\$ 59,721
Total Other Revenues	\$ 424,412

Total Operating Revenues

Residential Customer Charge	\$ 1,001,006
Residential Commodity Charge	\$ 2,451,093
Total Residential Revenues	\$ 3,452,099
Commercial Customer Charge	\$ 102,484
Commercial Commodity Charge	\$ 310,490
Total Commercial Revenues	\$ 412,974
Private Fire	\$ 18,256
Automatic Sprinkler System	\$ 1,281
Total Fire Revenues	\$ 19,536
Sub-Total Tariffed Rate Revenues	\$ 3,884,609
Other Operating Revenues	\$ 424,412
Total Operating Revenues	\$ 4,309,019

THE RAYTOWN WATER COMPANY

Development of Tariffed Rates-Water

Staff proposes to increase currently tariffed rates by a percentage equal to the agreed-upon overall revenue increase divided by the revenues generated by the currently tariffed rates.

Revenues Generated by Current Tariffed Rates	\$ 4,309,019
Agreed-Upon Overall Revenue Increase	\$ 1,174,782
Percentage Increase Needed	27.263%

Metered Customer Rates

Meter Size	Current Service Charge	Proposed Service Charge	Current Usage Rate	Proposed Usage Rate
5/8"	\$ 12.86	\$ 20.53	\$ 8.08	\$ 9.56
1"	\$ 23.33	\$ 37.25	\$ 8.08	\$ 9.56
1.5"	\$ 40.54	\$ 64.73	\$ 8.08	\$ 9.56
2"	\$ 61.24	\$ 97.78	\$ 8.08	\$ 9.56
3"	\$ 109.46	\$ 174.78	\$ 8.08	\$ 9.56
4"	\$ 178.31	\$ 284.71	\$ 8.08	\$ 9.56

Private Fire Hydrants and Automatic Sprinkler Systems

	Current Charge	Proposed Charge
Fire Hydrant	\$ 236.17	\$ 378.97

Sprinkler Meter Size	Current Charge	Proposed Charge
2" or less	\$ 28.18	\$ 45.73
4"	\$ 112.10	\$ 181.90
6"	\$ 236.17	\$ 383.22
8"	\$ 425.08	\$ 689.75
10"	\$ 631.28	\$ 1,024.34

THE RAYTOWN WATER COMPANY

Revenue Annualizations at Proposed Rates-Water

Annualized Customer Counts and Customer Charge Revenues

Residential Customer Charge

Meter Size	Residential	Rate *	Annual Revenue
5/8"	6,083	\$ 20.53	\$ 1,498,899
1"	80	\$ 37.25	\$ 35,762
1.5"	14	\$ 64.73	\$ 10,875
2"	26	\$ 97.78	\$ 30,509
3"	9	\$ 174.78	\$ 18,876
4"	1	\$ 284.71	\$ 3,417
Total	6,213		\$ 1,598,337

*Monthly Service Charge

Commercial Customer Charge

Meter Size	Commercial	Rate *	Annual Revenue
5/8"	242	\$ 20.53	\$ 59,631
1"	74	\$ 37.25	\$ 33,080
1.5"	27	\$ 64.73	\$ 20,973
2"	39	\$ 97.78	\$ 45,763
3"	2	\$ 174.78	\$ 4,195
4"	0	\$ 284.71	\$ -
Total	384		\$ 163,641

*Monthly Service Charge

Annualized Commodity Sales - Volumes and Revenues

Meter Size	Residential*	Rate	Annual Revenue
5/8"	25,548,600	\$ 9.56	\$ 2,441,342
1"	1,440,000	\$ 9.56	\$ 137,602
1.5"	221,200	\$ 9.56	\$ 21,137
2"	1,549,600	\$ 9.56	\$ 148,075
3"	1,249,200	\$ 9.56	\$ 119,370
4"	326,700	\$ 9.56	\$ 31,218
Total	30,335,300		\$ 2,898,743

*Volumes adjusted as needed per net revenue annualization at current rates.

Annualized Commodity Sales - Volumes and Revenues

Meter Size	Commercial*	Rate	Annual Revenue
5/8"	1,040,600	\$ 9.56	\$ 99,436
1"	540,200	\$ 9.56	\$ 51,620
1.5"	496,800	\$ 9.56	\$ 47,473
2"	1,696,500	\$ 9.56	\$ 162,112
3"	68,600	\$ 9.56	\$ 6,555
4"	-	\$ 9.56	\$ -
Total	3,842,700		\$ 367,196

*Volumes adjusted as needed per net revenue annualization at current rates.

Private Fire Hydrants and Automatic Sprinkler Systems Annual Charge

Code	Number of Hydrants/Lines	Meter Size	Customers as of	Proposed Rate	Annual Customer	Annual Fire
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Fire Hydrants and Automatic Sprinkler Systems

FA (500)	1	PVT F Hyd/F Lines	35	\$ 378.97	\$ 378.97	\$ 13,264
FB (501)	2	PVT F Hyd/F Lines	16	\$ 378.97	\$ 757.93	\$ 12,127
FC (502)	3	PVT F Hyd/F Lines	1	\$ 378.97	\$ 1,136.90	\$ 1,137
FD (503)	4	PVT F Hyd/F Lines	0	\$ 378.97	\$ 1,515.86	\$ -
FE (504)	1	4" F/Line Standpipe	4	\$ 181.90	\$ 181.90	\$ 728
FF (505)	1	8" F/Line Standpipe	3	\$ 689.75	\$ 689.75	\$ 2,069
			59			\$ 29,324
FG (506)	2	F/H-1ea. 4", 6"		\$ 378.97	\$ 757.93	\$ 758
	1	4" F/Line Standpipe		\$ 181.90	\$ 181.90	\$ 182
	1	6" F/Line Standpipe		\$ 383.22	\$ 383.22	\$ 383
	1	8" F/Line Stand	1	\$ 689.75	\$ 689.75	\$ 690
FH (507)		< or = 2" F/Line Standpipe	3	\$ 45.73	\$ 45.73	\$ 137
		10" Standpipe	0	\$ 1,024.34	\$ 1,024.34	\$ -
TOTALS			63			\$ 2,150

Total Fire \$ 31,474

Other Operating Revenues

Late Charges	\$ 93,090
Metered Sales of Bulk Water	\$ 5,716
NSF Checks - Charges	\$ 2,315
Off/On During Hours	\$ 79,690
KC Public Water Sales Revenue	\$ 8,904
Antenna Rents Revenue	\$ 166,505
Discounts Earned	\$ 2,807
Trash Bags Revenue	\$ 5,664
9820 Building Revenue	\$ -
Multi Other Miscellaneous	\$ 59,721
Total Other Revenues	\$ 424,412

Total Operating Revenues

Residential Customer Charge	\$ 1,598,337
Residential Commodity Charge	\$ 2,898,743
Total Residential Revenues	\$ 4,497,080
Commercial Customer Charge	\$ 163,641
Commercial Commodity Charge	\$ 367,196
Total Commercial Revenue	\$ 530,837
Private Fire	\$ 29,324
Automatic Sprinkler System	\$ 2,150
Total Fire Revenues	\$ 31,474
Sub-Total Tariffed Rate Revenues	\$ 5,059,391
Other Operating Revenues	\$ 424,412
Total Revenues at Proposed Rates	\$ 5,483,803

Revenue Check - Proposed Rates vs. Current Rates

Total Revenues at Proposed Rates	\$ 5,483,803
Total Revenues at Current Rates	\$ 4,309,019
Increase In Revenues at Proposed Rates	\$ 1,174,784
Agreed-Upon Increase in Operating Revenues	\$ 1,174,782

Note: The difference between Increase Revenues at Proposed Rates and Agreed-Upon Increase in Operating Revenues is due to rounding in the EMS Run and further calculations.

THE RAYTOWN WATER COMPANY

Residential Customer Bill Comparison-Water

Rates for 5/8" Meter			
Current Base Customer Charge	Proposed Base Customer Charge	Current Usage Rate	Proposed Usage Rate
\$12.86	\$20.53	\$8.08	\$9.56

Current service charge is monthly charge.

Usage rate is per 1,000 gallons used.

MONTHLY BILL COMPARISON

4,000 gallons/month usage

Current Rates

Customer Charge	\$ 12.86
Usage Charge	\$ 32.32
Total Bill	\$ 45.18

Proposed Rates

Customer Charge	\$ 20.53
Usage Charge	\$ 38.24
Total Bill	\$ 58.77

INCREASES

Customer Charge

\$ Increase	\$7.67
% Increase	59.673%

Usage Charge

\$ Increase	\$5.92
% Increase	18.317%

Total Bill

\$ Increase	\$13.59
% Increase	30.089%