UNANIMOUS AGREEMENT REGARDING DISPOSITION OF SMALL UTILITY COMPANY REVENUE INCREASE REQUEST

CARL R. MILLS

MO PSC FILE NO. WR-2021-0177

BACKGROUND

Carl R. Mills ("CRM" or "Company") initiated the small company revenue increase request ("Request") for water and sewer service that is the subject of the above-referenced Missouri Public Service Commission ("Commission") File Number by submitting a letter to the Secretary of the Commission in accordance with the provisions of Commission Rule 20 CSR 4240-10.075, Staff Assisted Rate Case Procedure. In its request letter, which was received at the Commission's offices on December 15, 2020, CRM set forth its request for a zero increase in its total annual water service operating revenues. CRM provides service to 7 water customers.

Pursuant to the provisions of the Staff Assisted Rate Case Procedure and related internal operating procedures, Staff initiated an audit of CRM's books and records, a review of its customer service and general business practices, a review of its existing tariff, an inspection of CRM's facilities and a review of its operation of its facilities. (These activities are collectively referred to hereinafter as Staff's "investigation" of the Company's Request.)

Upon completion of its investigation of CRM's Request, Staff provided CRM, the Office of the Public Counsel ("Public Counsel"), and Derald Morgan ("Intervenor") with information regarding Staff's investigation and the results of the investigation, including Staff's initial recommendations for resolution of the Company's Request.

RESOLUTION OF THE COMPANY'S RATE REQUEST

Pursuant to negotiations held subsequent to the Company's and Public Counsel's receipt of the above-referenced information regarding Staff's investigation of CRM's request, Staff, Public Counsel, Intervenor, and CRM hereby state the following agreements:

(1) The agreed upon decrease of $161 to annual water revenue requirement, subtracted from the level of previous revenues of $8,111 results in overall annual revenues of $7,950. This revenue requirement is just and reasonable and designed to recover CRM's cost of service. The revenue requirement is shown on the ratemaking income statement found in Attachment A.

(2) The Auditing Department conducted a full and complete audit of CRM's books and records using the 12-month period ended December 31, 2020, as the basis for the revenue requirement determined above. The audit findings can be found in Attachments B and C.

(3) The agreed upon net rate base is $15,479. The development of this amount is shown on the rate base worksheet that is found in Attachment C. This amount is included in the audit work papers in the ultimate determination of the revenue requirement shown in (1) above.

(4) Included in Attachment B is the agreed upon capital structure which includes CRM's overall recommended rate of return of 6.73%, which is calculated based on a hypothetical capital structure consisting of 100% equity and a return on equity of 6.73%.

(5) The schedule of depreciation rates in Attachment D includes the depreciation rates used by Staff in its revenue requirement analysis and shall be the prescribed schedule of water/sewer plant depreciation rates for CRM.

(6) To allow CRM the opportunity to collect the revenue requirement agreed to in (1) above, the rates as shown on Attachment E are just and reasonable rates that CRM will be allowed to charge its customers. The impact of these rates will be as shown on Attachment F, also attached.

(7) For the purposes of implementing the agreements set out in this disposition agreement, CRM will file with the Commission, proposed tariff revisions containing the rates, charges, and language set out in the example tariff sheet(s) attached as Attachment G. The proposed tariff revisions will bear the effective date of June 26, 2021.

(8) The current PSC MO No. 1 Original Sheet No. 4 tariff will be cancelled and replaced by PSC MO No. 1 Revised Sheet No. 4, which is included in the example tariff described above.

(9) CRM agrees to obtain actual meter readings for each customer on a monthly basis for billing purposes, pursuant to 20 CSR 4240-13.020(2)(A)-(C).

(10) CRM shall mail its customers a final written notice of the rates and charges included in its proposed tariff revisions prior to or with its next billing cycle after issuance of the Commission order approving the terms of this Disposition Agreement. The notice shall include a summary of the impact of the proposed rates on an average residential customer's bill.

(11) Staff or Public Counsel may conduct follow-up reviews of CRM's operations to ensure that it has complied with the provisions of this Disposition Agreement.

(12) CRM, Staff, Public Counsel, and Intervenor agree that they have read the foregoing Disposition Agreement, that facts stated therein are true and accurate to the best of the Company's knowledge and belief, that the foregoing conditions accurately reflect the agreement reached between the parties; and that the Company freely and voluntarily enters into this Disposition Agreement.

(13) CRM, Staff, Public Counsel, and Intervenor agree to Staff's recommendations outlined in the Staff Conclusions and Recommendations section in its Water and Sewer Report, identified as Attachment I to the Disposition Agreement.

(14) The above agreements satisfactorily resolve all issues identified by Staff, Public Counsel, Intervenor and CRM regarding its request, except as otherwise specifically stated herein.

Additional Matters

Other than the specific conditions agreed upon and expressly set out herein, the terms of this Unanimous Disposition Agreement reflect compromises between the Staff, Public Counsel the Company, and Intervenor, and no party has agreed to any particular ratemaking principle in arriving at the amount of the annual operating revenue decrease specified herein.

The results of Staff's inspections and review of CRM's operation of its facilities can be found in the Customer Experience Department Report and Water and Sewer Department Report, Attachments H and I, respectively. Staff has completed a Summary of Case Events and has included that summary as Attachment J to this Unanimous Disposition Agreement.

CRM, Public Counsel, Intervenor, and Staff acknowledge that Staff will be filing this Unanimous Disposition Agreement and the attachments hereto, in the existing case and that CRM will file the proposed tariff revisions called for in the agreement. CRM and Public Counsel also acknowledge that Staff may make other filings in this case.

Additionally, CRM, Intervenor, and Public Counsel agree that subject to the rules governing practice before the Commission and without waiving the confidentiality of the facts and positions disclosed in the course of settlement, Staff shall have the right to provide an oral explanation to support its entering into this Partial Disposition Agreement, if the Commission

requests one at any agenda meeting at which this case is noticed to be considered by the Commission. Subject to the rules governing practice before the Commission and without waiving the confidentiality of the facts and positions disclosed in the course of settlement, Staff will be available to answer Commission questions regarding this Partial Disposition Agreement. To the extent reasonably practicable, Staff shall provide CRM with advance notice of any such agenda meeting so that it may have the opportunity to be present and/or represented at the meeting.

SIGNATURES

Agreement Signed and Dated:

Carl R. Mills — 5-17-21 — Date
Owner

Jim Busch — 5/19/21 — Date
Manager – Water & Sewer Department
Missouri Public Service Commission Staff

Marc Poston — 5/19/21 — Date
Director
Office of the Public Counsel

Derald Morgan — 5/18/2021 — Date
Intervenor

List of Attachments

Attachment A – Ratemaking Income Statements
Attachment B – Auditing Department Report
Attachment C – EMS Runs
Attachment D – Schedules of Depreciation Rates
Attachment E – Rate Design Worksheets
Attachment F – Billing Comparison Worksheet
Attachment G – Example Tariff
Attachment H – CXD Report
Attachment I – Water and Sewer Department Report

Attachment J – Summary of Events

Attachment K – S&P RatingsDirect 05-27-2009

Attachment L – S&P RatingsDirect 11-30-2007

Disposition Agreement Attachment A

Ratemaking Income Statement

Carl R. Mills

Rate Making Income Statement-Water

	Operating Revenues at Current Rates		
1	Tariffed Rate Revenues *	$	8,111
2	Other Operating Revenues *	$	-
3	**Total Operating Revenues**	**$**	**8,111**
4	* See "Revenues - Current Rates" for Details		

Cost of Service

	Item		Amount	Allocation		Fixed Expense		Variable Expense
2	Electricity-Well	$	2,287	75%	$	1,715	$	572
3	Chemicals	$	-	0%	$	-	$	-
3	Outside Services Employed	$	1,200	75%	$	900	$	300
4	Billing/Office Supplies	$	21	100%	$	21	$	-
5	Uncollectible Amounts	$	-	0%	$	-	$	-
6	Administration & General - Salaries	$	2,017	85%	$	1,714	$	303
7	Bank Fee	$	60	100%	$	60	$	-
	Other Miscellenous Expense	$	25	100%	$	25	$	-
8	MO DNR Fees	$	-	0%	$	-	$	-
	PSC Assessment	$	53	100%	$	53	$	-
9	Rate Case Expense	$	-	0%	$	-	$	-
10	Amortization Expense	$	-	0%	$	-	$	-
11	Depreciation Expense	$	678	50%	$	339	$	339
12	Property Taxes	$	-	0%	$	-	$	-
13	Payroll Taxes	$	211	100%	$	211	$	-
14	Interest Expense	$	-	0%	$	-	$	-
15	Return on Equity	$	1,042	50%	$	521	$	521
16	Income Taxes	$	356	50%	$	178	$	178
	Total Cost of Service	**$**	**7,950**		**$**	**5,738**	**$**	**2,212**
	Overall Revenue Increase Needed	**$**	**(161)**		**$**	**5,738**	**$**	**2,212**

Disposition Agreement Attachment B

Auditing Department Report

AUDITING DEPARTMENT RECOMMENDATION MEMORANDUM

TO: **Matthew Barnes, Water and Sewer Department, Case Manager**
Mark Johnson, Staff Counsel's Office
Kevin Thompson, Staff Counsel's Office
Jamie Myers, Staff Counsel's Office

FROM: **Caroline Newkirk, Senior Utility Regulatory Auditor**
Ashley Sarver, Senior Utility Regulatory Auditor
Peter Chari, Senior Utility Regulatory Auditor

SUBJECT: **Auditing and Financial Analysis Units' Findings and Recommended Cost of Service**
Carl Richard Mills -- Case No. WR-2021-0177

DATE: **April 20, 2021**

Carl R. Mills ("CRM") is a regulated public water utility that provides water service to seven customers[1] in the Carriage Oaks Estates subdivision located in Stone County, Missouri.

The Commission's *Report and Order* in Case No. WA-2018-0370, effective November 8, 2019, granted CRM a certificate of convenience and necessity ("CCN") authorizing it to install, own, acquire, construct, operate, control, manage and maintain systems in Carriage Oaks Estates. The Commission *Report and Order* in Case No. WA-2018-0370 also ordered CRM to file a general rate case one year after the effective date of the CCN.[2]

On December 21, 2020, CRM filed for a general rate case to its water rates under the Commission's Staff Assisted Rate Case Procedure, 20 CSR 4240-10.075, requesting no increase in its annual water operating revenues.

REVENUE DECREASE RECOMMENDATION

Based upon the Missouri Public Service Commission Staff's ("Staff") examination of CRM's books and records and discussions with the CRM's volunteer staff, Staff recommends an annual revenue requirement decrease of $161, which represents an approximate 1.98% decrease from current rates. Attached to this Memorandum are Staff's Accounting Schedules and relevant workpapers related to its review and audit of CRM's financial operations.

[1] Including Mr. Mills, the owner.
[2] *Report and Order*, Case No. WA-2018-0370, pg. 14, paragraph 4.

Test Year and Update Period

Staff used a test year consisting of the twelve months ending December 31, 2020, to develop its revenue requirement recommendation in this case. No set update period was used in determining CRM's cost of service.

Rate Base

Complete records for the cost of plant-in-service constructed during the beginning of the subdivision development, over 20 years ago, were not provided to Staff. In Case No. WA-2018-0370, Staff created an estimate of the water utility plant-in-service and depreciation reserve. In this case, CRM sent Staff invoices for the cost of four bladder tanks replaced in 2018. CRM also sent notice of an accumulator and check valve replacement in 2018. Staff has added these plant items from 2018 to CRM's Plant in Service. Staff's net rate base as of December 31, 2020, is $15,479. CRM did not provide updated information concerning its rate base beyond the test year ending December 31, 2020, as of the drafting of this memorandum.

While this water system only has seven current water customers, it was constructed with the capacity to provide service to approximately 55 customers. However, since there are only seven customers at present, Staff proposes applying a capacity adjustment as the small fraction of the total customer potential should not be required to pay for the entire capital cost of the water system This treatment of this capacity adjustment is consistent with Staff's position in Case No. WA-2018-0370.

Depreciation Rates

Staff recommends no change to the approved depreciation schedule as set in Case No. WA-2018-0037. The depreciation schedule has been included in this memorandum as Attachment D.
The depreciation rates used in this case were provided by Staff's Engineering Analysis Department.

Rate of Return and Capital Structure

Staff's Financial Analysis Department provided the Audit Staff with a preliminary rate of return ("ROR") recommendation. To recommend the allowed ROR, the Staff of the Financial Analysis Department used its "Small Utility Return on Equity (ROE)/Rate of Return (ROR) Methodology" ("ROR Methodology"). Staff's ROR Methodology is based on the S&P Credit Ratings guide[3] and

[3] Criteria Methodology: Business Risk/Financial Risk Matrix Expanded, May 27, 2009 (see Attachment K)

the Bond Yield Plus Risk Premium method.[4] The S&P Credit Ratings guide provides parameters for estimating credit ratings. Credit ratings are in turn used to estimate debt cost. The Bond Yield Plus Risk Premium method simply adds a premium, known as equity risk premium ("ERP"), to the estimated debt cost to come up with a return on equity ("ROE"). ROE is combined with debt cost to arrive at an estimated ROR.

To estimate credit ratings using the S&P Credit Ratings guide, Staff examined the financial risk profile ("FRP") and business risk profile ("BRP") of CRM. Usually, to examine the FRP and BRP of a small utility, Staff would analyze financial statements. In the case of CRM, there are no financial statements – CRM only provided a ledger of cash receipts and payments since it started operation in 2019.[5] The ledger showed a positive balance. CRM also provided information on its capital structure.

Background information on utilities' BRP is important in determining CRM's BRP. According to a November 27, 2007, S&P Credit Ratings publication,[6] regulated utilities and holding companies that are utility-focused virtually always fall in the upper range ("Excellent" or "Strong") of business risk profile.[7] In addition, all water utilities currently rated by S&P are assigned a BRP of "Excellent", owing to their regulated revenues. Staff has not seen any information or evidence that shows CRM's BRP is significantly different from other water utilities. The main difference between CRM and water utilities rated by S&P is size: CRM serves only seven customers. In Staff's reasonable judgement, a BRP of "Strong", a notch lower than the "Excellent" assigned to water utilities by S&P Credit Ratings, for CRM is appropriate.

For FRP, Staff assigns "Minimal" for CRM because CRM is capitalized with 100% equity.[8] According to a May 27, 2009, S&P guide, utilities with capital structures with less than 25% debt to capital ratio typically have a FRP of "Minimal".[9]

With a FRP and BRP of "Minimal" and "Strong" for CRM, respectively, the S&P Credit Ratings guide matrix indicates a credit rating of 'AA'.[10] For perspective, the water utilities rated by S&P Credit Ratings have credit ratings ranging from A+ to A-, owing to their "Significant" financial risk profiles.

A credit rating of 'AA' for public utilities bonds has a current corresponding interest rate of 2.73%, according to the February 2021 edition of the Mergent Bond Record. Adding 4%[11] ERP, as

[4] Bond Yield Plus Risk Premium method is a cost of equity estimation methodology that simply adds an equity risk premium to a company's own debt cost.
[5] CRM Response to Staff Data Request No. 0001.
[6] U.S Utilities Ratings Analysis Now Portrayed In The S&P Corporate Ratings Matrix (see Attachment L)
[7] U.S. Utilities Ratings Analysis Now Portrayed In The S&P Corporate Ratings Matrix, November 30, 2007.
[8] CRM responses to Staff Data Requests Nos. 0003 and 0004.
[9] Criteria Methodology: Business Risk/Financial Risk Matrix Expanded, S&P's RatingsDirect, May 27, 2009.
[10] The S&P Credit Ratings guide uses a matrix system that combines BRP and FRP to predict a credit rating.
[11] 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).

prescribed by the Bond Yield Plus Risk Premium method, to the 2.73% estimated debt cost results in a 6.73% ROE. Since CRM is capitalized with 100% equity, CRM's ROR is also 6.73%.

Revenue

CRM provides water service to seven residential customers. CRM's tariff authorizes a quarterly non-metered monthly rate of $289.68 for service. For purposes of annualizing revenues, Staff multiplied the number of customers as of December 31, 2020, by the current quarterly non-metered monthly rate. Staff's analysis of revenues for CRM produced an annualized level of $8,111 for revenues.

Expenses

Electricity Expense

Staff has reviewed the electric bills for CRM to determine the amount of electricity expense to include in its rates for water operation. Staff reviewed the invoices from January 2020 to December 2020. Staff annualized the electricity expense based on the test year period of 12-months ending December 31, 2020.

Outside Services

CRM currently has a contract with **[redacted]** to operate and service the water system. This contract includes **[redacted]** Staff annualized the outside service expense by the current monthly contract rate of **[redacted]** per month multiplied by 12.

Payroll Expense

**[redacted]

- [redacted]

[redacted]

- [redacted]
- [redacted]**

Timesheets are not utilized for CRM volunteer staff.

In Data Request No. 0029.1, Staff requested an estimated number of hours worked for water system services provided to CRM. CRM's provided the following: **[redacted]**

Staff utilized the Missouri Economic Research and Information Center (MERIC) website[13] to determine an appropriate salary for **[redacted]**. MERIC is a research division of the Missouri Department of Economic Development that provides labor market information and is commonly used by Staff in water and sewer rate cases to compare wage rates for various utility services to operate these systems. This information is produced by research done in cooperation with the Missouri Department of Labor, and the website provides Missouri labor rates for various job classifications. Staff searched the database to find the market value pay rate for secretaries and administrative assistants in the Southwest region. In order to calculate reasonable compensation for the work **[redacted]** performs for CRM, Staff multiplied the mean hourly wage by **[redacted]** reported average hours per year. This creates an annualized payroll expense in the amount of $858 for **[redacted]**

Mr. Mills does not bill himself for water service, as he is the sole proprietorship of the water system and deals with the daily activity of the system, when needed. Staff reviewed two ways for calculating **[redacted]** salary. The first review of **[redacted]** payroll salary, would determine the annualized payroll expense for **[redacted]** would be appropriate at $1,159 a year; this equals the amount of revenue that would be collected from **[redacted]** if **[redacted]** charged himself for water service.

The second review of **[redacted]** payroll salary, Staff examined wage data from the MERIC website. Based on Staff's review of the job description, Staff used the job description from

[12] No job title was provided for **[redacted]**.
[13] https://meric.mo.gov/

MERIC of Project Management Specialists and Business Operations Specialists. In order to calculate reasonable compensation for the work **[redacted]** performs for CRM, Staff multiplied the mean hourly wage by **[redacted]** reported average hours per year. This would create an annualized payroll expense in the amount of $2,908 for **[redacted]**.

Staff determined the most appropriate and reasonable payroll expense for **[redacted]** would be to reimburse **[redacted]** for the water. Therefore, Staff include an annualized salary expense of $1,159 for **[redacted]**.

Staff did not include a payroll expense for **[redacted]**, partly because the size of the system does not warrant **[redacted]** employees' oversight. Also, CRM did not add plant or have any unexpected events that would warrant **[redacted]** to need assistance.

Payroll Taxes

Payroll taxes were annualized by multiplying the current Old-Age, Survivors, and Disability Insurance, Medicare, Federal Unemployment Tax Act and State Unemployment Tax Act rates to Staff's current estimated annualized payroll.

Bank Fees

Staff reviewed the bank fees analysis provided by CRM. Staff has included an annualized level of bank fees.

PSC Assessment

Staff calculated an annual assessment by multiplying annualized revenues by the Commission's water/sewer assessment factor since CRM was not billed a 2021 PSC Assessment; however, CRM will be billed a 2022 PSC Assessment.

Rate Case Expense

At this time, there have been no rate case expense-related invoices received from CRM for this rate case. Staff will determine and analyze the appropriate allowance for rate case expense once the invoices are provided.

Billing / Office Supplies

Staff has included an estimated annual cost for billing and office supplies. Mr. Mills currently donates items for billing and office supplies. CRM bills each customer quarterly so Staff calculated a reasonable cost for stamps, envelopes, paper, and address labels. Staff's annualized level for billing and office supplies is $21.

Other Expense

Staff excluded from the cost of service amounts associated with expenses that are legal fees not related to this rate case and a permit fee for the unregulated sewer system.

Disposition Agreement Attachment C

EMS Run

Carl Richard Mills
Informal Case/Rate Case
WR-2021-0177
Test Year Ending 12-31-2020
Rate Base Required Return on Investment Schedule - Water

Line Number	A Rate Base Description	B Dollar Amount	
1	**Plant In Service**	**$23,922**	From Plant Schedule
2	**Less Accumulated Depreciation Reserve**	**$8,443**	From Depreciation Reserve Schedule
3	**Net Plant In Service**	**$15,479**	
4	**Other Rate Base Items:**	**$0**	
	Contribution in Aid of Construction Amortization (positive or zero)	**$0**	
	Contribution in Aid of Construction (negative or zero)	**$0**	
5	**Total Rate Base**	**$15,479**	
6	**Total Weighted Rate of Return Including Income Tax**	**9.03%**	From PreTax Return & Taxes Schedule
7	**Required Return & Income Tax**	**$1,397**	

Carl Richard Mills
Informal Case/Rate Case
WR-2021-0177
Test Year Ending 12-31-2020
Rate of Return Including Income Tax - Water

		A		B	formulas
1	**State Income Tax Rate Statutory / Effective**	**6.25%**	**(2)**	**5.63%**	(1 - (B2 x .5)) x A1
2	**Federal Income Tax Rate Statutory / Effective**	**21.00%**	**(1) & (2)**	**19.82%**	(1 - B1) x A2
3	**Composite Effective Income Tax Rate**			**25.45%**	B1 + B2
4	**Equity Tax Factor**			**1.3414**	1 / (1-B3)
5	**Recommended Weighted Rate of Return on Equity - Common and Preferred**			**6.73%**	From Capital Structure Schedule
6	**Weighted Rate of Return on Equity Including Income Tax**			**9.03%**	B4 x B5
7	**Recommended Weighted Rate of Return on Debt - Long-Term and Short-Term**			**0.00%**	From Capital Structure Schedule
8	**Total Weighted Rate of Return Including Income Tax**			**9.03%**	B6+B7

To Rate Base Schedule

(1) If Sub-Chapter S Corporation, Enter Y: **N**

Equity Income Required & Preliminary Federal Tax **$1,319**

Tax Rate Table

Net Income Range				
Start	**End**	**Tax Rate**	**Amount in Range**	**Tax on Range**
$0	**$50,000**	**21.00%**	**$1,319**	**$277**
$50,001	**$75,000**	**21.00%**	**$0**	**$0**
$75,001	**$100,000**	**21.00%**	**$0**	**$0**
$100,001	**$335,000**	**21.00%**	**$0**	**$0**
$335,001	**$9,999,999,999**	**21.00%**	**$0**	**$0**
			$1,319	**$277**
			Consolidated Tax Rate:	
			Average Tax Rate:	**0.21**

Carl Richard Mills
Informal Case/Rate Case
WR-2021-0177
Test Year Ending 12-31-2020
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	$15,479	100.00%	6.73%	6.730%
2	Other Security-Non Tax Deductible	$0	0.00%	0.00%	0.000%
3	Preferred Stock	$0	0.00%	2.73%	0.000%
4	Long Term Debt	$0	0.00%	0.00%	0.000%
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	$15,479	100.00%		6.730%

To PreTax Return Rate Schedule

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

Carl Richard Mills
Informal Case/Rate Case
WR-2021-0177
Test Year Ending 12-31-2020
Plant In Service - Water

Line Number	A Account # (Optional)	B Plant Account Description	C Total Plant	D Adjustment Number	E Adjustments	F Jurisdictional Allocation	G Adjusted Jurisdictional
1		INTANGIBLE PLANT					
2	301.000	Organization	$0			100.00%	$0
3	302.000	Franchises	$0			100.00%	$0
4		TOTAL INTANGIBLE PLANT	$0		$0		$0
5		SOURCE OF SUPPLY PLANT					
6	310.000	Land & Land Rights - SSP	$1,909			100.00%	$1,909
7	311.000	Structures & Improvements - SSP	$865			100.00%	$865
8	312.000	Collection & Impounding Reservoirs	$0			100.00%	$0
9	313.000	Lake, River & Other Intakes	$0			100.00%	$0
10	314.000	Infiltration Galleries & Tunnels 1	$10,564			100.00%	$10,564
11	315.000	Infiltration Galleries & Tunnels	$0			100.00%	$0
12	316.000	Supply Mains	$0			100.00%	$0
13		TOTAL SOURCE OF SUPPLY PLANT	$13,338		$0		$13,338
14		PUMPING PLANT					
15	321.000	Structures & Improvements - PP	$0			100.00%	$0
16	325.000	Electric Pumping Equipment	$764			100.00%	$764
17	325.100	Electric Submersible Pumping	$764			100.00%	$764
18	325.200	High Service Pumping	$1,522			100.00%	$1,522
19	326.000	Diesel Pumping Equipment	$0			100.00%	$0
20	328.000	Other Pumping Equipment	$0			100.00%	$0
21		TOTAL PUMPING PLANT	$3,050		$0		$3,050
22		WATER TREATMENT PLANT					
23	330.000	Land & Land Rights-WTP	$0			100.00%	$0
24	331.000	Structures & Improvements - WTP	$0			100.00%	$0
25	332.000	Water Treatment Equipment	$629			100.00%	$629
26		TOTAL WATER TREATMENT PLANT	$629		$0		$629
27		TRANSMISSION & DISTRIBUTION PLANT					
28	340.000	Land & Land Rights-T&D	$0			100.00%	$0
29	341.000	Structures & Improvements - T&D	$0			100.00%	$0
30	342.000	Distribution Reservoirs & Standpipes	$3,755			100.00%	$3,755
31	344.000	Fire Mains	$0			100.00%	$0
32	345.000	Services	$1,750			100.00%	$1,750
33	343.000	Transmission & Distribution Mains	$0			100.00%	$0
34	346.000	Meters- Bronze Chamber	$0			100.00%	$0
35	346.000	Meters- Plastic Chamber	$0			100.00%	$0
36	347.000	Meter Installations- Bronze	$1,400			100.00%	$1,400
37	347.000	Meter Installations- Plastic	$0			100.00%	$0
38	348.000	Other Transmission & Distribution Plant	$0			100.00%	$0
39	349.000	Hydrants	$0			100.00%	$0
40		TOTAL TRANS. & DISTRIBUTION PLANT	$6,905		$0		$6,905
41		GENERAL PLANT					
42	370.000	Land & Land Rights-GP	$0			100.00%	$0
43	371.000	Structures & Improvements - GP	$0			100.00%	$0
44	372.000	Office Furniture & Equipment	$0			100.00%	$0
45		Office Computer Equipment	$0			100.00%	$0
46	373.000	Transportation Equipment - GP	$0			100.00%	$0
47	379.000	Other General Equipment	$0			100.00%	$0
48		TOTAL GENERAL PLANT	$0		$0		$0
49		TOTAL PLANT IN SERVICE	$23,922		$0		$23,922

Carl Richard Mills
Informal Case/Rate Case
WR-2021-0177
Test Year Ending 12-31-2020
Schedule of Adjustments for Plant in Service - Water

A Plant Adjustment Number	B Plant In Service Adjustment Description	C Account Number	D Adjustment Amount	E Total Adjustment
	Total Plant Adjustments			**$0**

Carl Richard Mills
Informal Case/Rate Case
WR-2021-0177
Test Year Ending 12-31-2020
Depreciation Expense - Water

Line Number	A Account Number	B Plant Account Description	C Adjusted Jurisdictional	D Depreciation Rate	E Depreciation Expense	F Average Life	G Net Salvage
1		INTANGIBLE PLANT					
2	301.000	Organization	$0	0.00%	$0	0	0.00%
3	302.000	Franchises	$0	0.00%	$0	0	0.00%
4		TOTAL INTANGIBLE PLANT	$0		$0		
5		SOURCE OF SUPPLY PLANT					
6	310.000	Land & Land Rights - SSP	$1,909	0.00%	$0	0	0.00%
7	311.000	Structures & Improvements - SSP	$865	2.50%	$22	0	0.00%
8	312.000	Collection & Impounding Reservoirs	$0	0.00%	$0	0	0.00%
9	313.000	Lake, River & Other Intakes	$0	0.00%	$0	0	0.00%
10	314.000	Infiltration Galleries & Tunnels 1	$10,564	2.00%	$211	0	0.00%
11	315.000	Infiltration Galleries & Tunnels	$0	0.00%	$0	0	0.00%
12	316.000	Supply Mains	$0	0.00%	$0	0	0.00%
13		TOTAL SOURCE OF SUPPLY PLANT	$13,338		$233		
14		PUMPING PLANT					
15	321.000	Structures & Improvements - PP	$0	0.00%	$0	0	0.00%
16	325.000	Electric Pumping Equipment	$764	10.00%	$76	0	0.00%
17	325.100	Electric Submersible Pumping	$764	10.00%	$76	0	0.00%
18	325.200	High Service Pumping	$1,522	6.70%	$102	0	0.00%
19	326.000	Diesel Pumping Equipment	$0	0.00%	$0	0	0.00%
20	328.000	Other Pumping Equipment	$0	0.00%	$0	0	0.00%
21		TOTAL PUMPING PLANT	$3,050		$254		
22		WATER TREATMENT PLANT					
23	330.000	Land & Land Rights-WTP	$0	0.00%	$0	0	0.00%
24	331.000	Structures & Improvements - WTP	$0	0.00%	$0	0	0.00%
25	332.000	Water Treatment Equipment	$629	2.90%	$18	0	0.00%
26		TOTAL WATER TREATMENT PLANT	$629		$18		
27		TRANSMISSION & DISTRIBUTION PLANT					
28	340.000	Land & Land Rights-T&D	$0	0.00%	$0	0	0.00%
29	341.000	Structures & Improvements - T&D	$0	0.00%	$0	0	0.00%
30	342.000	Distribution Reservoirs & Standpipes	$3,755	2.50%	$94	0	0.00%
31	344.000	Fire Mains	$0	0.00%	$0	0	0.00%
32	345.000	Services	$1,750	2.50%	$44	0	0.00%
33	343.000	Transmission & Distribution Mains	$0	0.00%	$0	0	0.00%
34	346.000	Meters- Bronze Chamber	$0	0.00%	$0	0	0.00%
35	346.000	Meters- Plastic Chamber	$0	0.00%	$0	0	0.00%
36	347.000	Meter Installations- Bronze	$1,400	2.50%	$35	0	0.00%
37	347.000	Meter Installations- Plastic	$0	0.00%	$0	0	0.00%
38	348.000	Other Transmission & Distribution Plant	$0	0.00%	$0	0	0.00%
39	349.000	Hydrants	$0	0.00%	$0	0	0.00%
40		TOTAL TRANS. & DISTRIBUTION PLANT	$6,905		$173		
41		GENERAL PLANT					
42	370.000	Land & Land Rights-GP	$0	0.00%	$0	0	0.00%
43	371.000	Structures & Improvements - GP	$0	0.00%	$0	0	0.00%
44	372.000	Office Furniture & Equipment	$0	0.00%	$0	0	0.00%
45		Office Computer Equipment	$0	0.00%	$0	0	0.00%
46	373.000	Transportation Equipment - GP	$0	0.00%	$0	0	0.00%
47	379.000	Other General Equipment	$0	0.00%	$0	0	0.00%
48		TOTAL GENERAL PLANT	$0		$0		
49		**Total Depreciation**	$23,922		$678		

Note: Average Life and Net Salvage columns are informational and have no impact on the entered Depreciation Rate.

Carl Richard Mills
Informal Case/Rate Case
WR-2021-0177
Test Year Ending 12-31-2020
Accumulated Depreciation Reserve - Water

Line Number	A Account Number	B Depreciation Reserve Description	C Total Reserve	D Adjustment Number	E Adjustments	F Jurisdictional Allocation	G Adjusted Jurisdictional
1		INTANGIBLE PLANT					
2	301.000	Organization	$0			100.00%	$0
3	302.000	Franchises	$0			100.00%	$0
4		TOTAL INTANGIBLE PLANT	$0		$0		$0
5		SOURCE OF SUPPLY PLANT					
6	310.000	Land & Land Rights - SSP	$0			100.00%	$0
7	311.000	Structures & Improvements - SSP	$433			100.00%	$433
8	312.000	Collection & Impounding Reservoirs	$0			100.00%	$0
9	313.000	Lake, River & Other Intakes	$0			100.00%	$0
10	314.000	Infiltration Galleries & Tunnels 1	$4,225			100.00%	$4,225
11	315.000	Infiltration Galleries & Tunnels	$0			100.00%	$0
12	316.000	Supply Mains	$0			100.00%	$0
13		TOTAL SOURCE OF SUPPLY PLANT	$4,658		$0		$4,658
14		PUMPING PLANT					
15	321.000	Structures & Improvements - PP	$0			100.00%	$0
16	325.000	Electric Pumping Equipment	$573			100.00%	$573
17	325.100	Electric Submersible Pumping	$764			100.00%	$764
18	325.200	High Service Pumping	$458			100.00%	$458
19	326.000	Diesel Pumping Equipment	$0			100.00%	$0
20	328.000	Other Pumping Equipment	$0			100.00%	$0
21		TOTAL PUMPING PLANT	$1,795		$0		$1,795
22		WATER TREATMENT PLANT					
23	330.000	Land & Land Rights-WTP	$0			100.00%	$0
24	331.000	Structures & Improvements - WTP	$0			100.00%	$0
25	332.000	Water Treatment Equipment	$103			100.00%	$103
26		TOTAL WATER TREATMENT PLANT	$103		$0		$103
27		TRANSMISSION & DISTRIBUTION PLANT					
28	340.000	Land & Land Rights-T&D	$0			100.00%	$0
29	341.000	Structures & Improvements - T&D	$0			100.00%	$0
30	342.000	Distribution Reservoirs & Standpipes	$469			100.00%	$469
31	344.000	Fire Mains	$0			100.00%	$0
32	345.000	Services	$788			100.00%	$788
33	343.000	Transmission & Distribution Mains	$0			100.00%	$0
34	346.000	Meters- Bronze Chamber	$0			100.00%	$0
35	346.000	Meters- Plastic Chamber	$0			100.00%	$0
36	347.000	Meter Installations- Bronze	$630			100.00%	$630
37	347.000	Meter Installations- Plastic	$0			100.00%	$0
38	348.000	Other Transmission & Distribution Plant	$0			100.00%	$0
39	349.000	Hydrants	$0			100.00%	$0
40		TOTAL TRANS. & DISTRIBUTION PLANT	$1,887		$0		$1,887
41		GENERAL PLANT					
42	370.000	Land & Land Rights-GP	$0			100.00%	$0
43	371.000	Structures & Improvements - GP	$0			100.00%	$0
44	372.000	Office Furniture & Equipment	$0			100.00%	$0
45		Office Computer Equipment	$0			100.00%	$0
46	373.000	Transportation Equipment - GP	$0			100.00%	$0
47	379.000	Other General Equipment	$0			100.00%	$0
48		TOTAL GENERAL PLANT	$0		$0		$0
49		TOTAL DEPRECIATION RESERVE	$8,443		$0		$8,443

Carl Richard Mills
Informal Case/Rate Case
WR-2021-0177
Test Year Ending 12-31-2020
Schedule of Adjustments for Accumulated Depreciation Reserve - Water

A Reserve Adjustment Number	B Accumulated Depreciation Reserve Adjustments Description	C Account Number	D Adjustment Amount	E Total Adjustment Amount
	Total Reserve Adjustments			**$0**

Carl Richard Mills
Informal Case/Rate Case
WR-2021-0177
Test Year Ending 12-31-2020
Rate Revenue Feeder Schedule - Water

Line Number	A Description	Residential Non-Metered B Amount	C Amount	Total D Amount	E Amount
1	Customer Charge Revenues:				
2	Customer Number	7		7	
3	Bills Per Year	4			
4	Customer Bills Per year	28		28	
5	Current Customer Charge	$289.68			
6	Annualized Customer Charge Revenues		$8,111		$8,111
7	Commodity Charge Revenues:				
8	Total Gallons Sold	0		0	
9	Less: Base Gallons Included In Customer Charge	0		0	
10	Commodity Gallons	0		0	
11	Block 1, Commodity Gallons per Block	0			
12	Block 1, Number of Commodity Gallons per Unit	0			
13	Block 1, Commodity Billing Units	0.00			
14	Block 1, Existing Commodity Charge	$0.00			
15	Block 1, Annualized Commodity Charge Rev.		$0		$0
16	Total Annualized Water Rate Revenues		$8,111		$8,111

Commodity Billing Units are based on the number of commodity gallons applicable to each block, divided by the tariff usage rate gallons (e.g. for tariff rate of $2.50 per 1,000 gallons of usage, the commodity gallons for that rate would be divided by 1,000 to arrive at the number of commodity billing units.

Carl Richard Mills
Informal Case/Rate Case
WR-2021-0177
Test Year Ending 12-31-2020
Expense Schedule - Water

Line Number	A Account Number (Optional)	B Expense Description	C Company/ Test Year Amount	D Adjustment Number	E Adjustments	F Jurisdictional Allocation	G Adjusted Jurisdictional
1		OPERATIONS EXPENSES					
2		Electricity - (Well)	$1,957	W-2	$330	100.00%	$2,287
3		Chemicals	$0			100.00%	$0
4		TOTAL OPERATIONS EXPENSE	$1,957		$330		$2,287
5		MAINTENANCE EXPENSES					
6		Outside Services Employed	$1,200			100.00%	$1,200
7		TOTAL MAINTENANCE EXPENSE	$1,200		$0		$1,200
8		CUSTOMER ACCOUNT EXPENSE					
9		Billing / Office Supplies	$0	W-9	$21	100.00%	$21
10		Uncollectible Accounts	$0			100.00%	$0
11		TOTAL CUSTOMER ACCOUNT EXPENSE	$0		$21		$21
12		ADMINISTRATIVE & GENERAL EXPENSES					
13		Administration & General Salary	$0	W-13	$2,017	100.00%	$2,017
14		Bank Fee	$55	W-14	$5	100.00%	$60
15		Other Misc. Expenses	$1,642	W-15	-$1,617	100.00%	$25
16		TOTAL ADMINISTRATIVE AND GENERAL	$1,697		$405		$2,102
17		OTHER OPERATING EXPENSES					
18		MO DNR Fees	$0			100.00%	$0
19		PSC Assessment	$0	W-19	$53	100.00%	$53
20		Rate Case Expense	$0	W-20	$0	100.00%	$0
21		Amortization Expense	$0	W-21	$0	100.00%	$0
22		Depreciation	$0	W-22	$678	100.00%	$678
23		TOTAL OTHER OPERATING EXPENSES	$0		$731		$731
24		TAXES OTHER THAN INCOME					
25		Property Taxes	$0			100.00%	$0
26		Payroll Taxes	$0	W-26	$211	100.00%	$211
27		TOTAL TAXES OTHER THAN INCOME	$0		$211		$211
28		TOTAL OPERATING EXPENSES	$4,854		$1,698		$6,552

Carl Richard Mills
Informal Case/Rate Case
WR-2021-0177
Test Year Ending 12-31-2020
Expense Adjustment Schedule - Water

A Expense Adj Number	B Adjustment Description	C Account Number	D Adjustment Amount	E Total Adjustment
W-2	Electricity - (Well)			$330
	1. To annualize electricity for the well.		$330	
W-9	Billing / Office Supplies			$21
	1. To include an estimate for billing and office supplies.		$21	
W-13	Administration & General Salary			$2,017
	1. To include an estimate for payroll.		$2,017	
W-14	Bank Fee			$5
	1. To annualize bank fees.		$5	
W-15	Other Misc. Expenses			-$1,617
	1. To annualize misc. expense.		-$1,617	
W-19	PSC Assessment			$53
	1. To include an estimate for PSC Assessment fee.		$53	
W-20	Rate Case Expense			$0
	Description		$0	
W-21	Amortization Expense			$0
	Description		$0	
W-22	Depreciation			$678
	1. To Annualize Depreciation		$678	

Carl Richard Mills
Informal Case/Rate Case
WR-2021-0177
Test Year Ending 12-31-2020
Expense Adjustment Schedule - Water

A Expense Adj Number	B Adjustment Description	C Account Number	D Adjustment Amount	E Total Adjustment
W-26	Payroll Taxes			$211
	1. To include an estimate for payroll taxes based on payroll.		$211	
	Total Expense Adjustments			$1,698

Disposition Agreement Attachment D

Depreciation Rates

Carl R. Mills
SCHEDULE of DEPRECIATION RATES
WATER
WR-2021-0177

NARUC USOA ACCOUNT NUMBER	ACCOUNT DESCRIPTION	DEPRECIATION RATE	AVERAGE SERVICE LIFE (YEARS)	NET SALVAGE
	Source of Supply			
311	Structures & Improvements	2.5%	44	-10%
314	Wells & Springs	2.0%	55	-8%
	Pumping Plant			
321	Structures & Improvements	2.5%	44	-10%
325.1	Submersible Pumping Equipment	10.0%	12	-20%
325.2	High Service or Booster Pumping Equip.	6.7%	15	0%
	WaterTreatment Plant			
331	Structures & Improvements	2.5%	44	-10%
332	Water Treatment Equipment	2.9%	35	0%
	Transmission and Distribution			
342	Distribution Reservoirs & Standpipes	2.5%	42	-5%
343	Transmission & Distribution Mains	2.0%	50	0%
345	Customer Services	2.5%	40	0%
346.1	Customer Meters, Plastic Compnents	10.0%	10	0%
347	Customer Meter Pits & Installation	2.5%	40	0%
348	Hydrants	2.0%	50	0%
	General Plant CLASS D			
371	Structures & Improvements	2.5%	40	0%
372	Office Furniture & Equipment	5.0%	20	0%
372.1	Office Electronic & Computer Equip.	20.0%	5	0%
373	Transportation Equipment	13.0%	7	9%
379	Other General Equipment (tools, shop equip., backhoes, trenchers, etc.)	6.7%	13	13%

Disposition Agreement Attachment E

Rate Design Worksheet

Carl R. Mills

Development of Tariffed Rates-Water

Revenues Generated by Current Tariffed Rates	**$ 8,111**
Agreed-Upon Overall Revenue Increase	**$ (161)**
Percentage Increase Needed	**-1.985%**

Metered Customer Rates

	Current Quarterly Service Charge	Proposed Monthly Service Charge	Current Usage Rate	Proposed Usage Rate
Full-Time Metered	$ 289.68	$ 68.31	$ -	$ 6.3511

Customer Charge	Number	Factor
Full-Time Metered	7	0

Fixed Expenses
$ 5,738

Commodity Charge	Variable Expenses	Total Usage (1,000 Gallons)	Rate Per 1,000 Gallons
	$ 2,212	348	$ 6.3511

Note: Annualized sales calculated from Company response to DR 0051.

Disposition Agreement Attachment F

Billing Comparison Worksheet

Carl R. Mills

Residential Customer Bill Comparison-Water

Rates for 5/8" Meter

Customer		Current Quarterly Customer Charge	Proposed Monthly Customer Charge	Current Usage Rate	Proposed Usage Rate
Full-Time Metered		$ 289.68	$ 68.31	$ -	$ 6.3511

Current service charge is Quarterly charge

Usage rate is per 1,000 gallons used

MONTHLY BILL COMPARISON

Full Time average 4,000 gallons/month usage

	Proposed Rates	
	Customer Charge	$ 68.31
	Usage Charge	$ 25.40
	Total Bill	**$ 93.71**

Disposition Agreement Attachment G

Example Tariff

Name of Utility: Carl R. Mills
Service Area: Carriage Oaks Estates, Stone County, MO

Rules and Regulations Governing Rendering of Water Service

Schedule of Rates

Availability:	These rates are available to any water customer on Company's mains for supplying water service requested.
Water Rates:	There shall be a monthly minimum charge of $68.31. *
	There shall be a metered usage charge applied on a monthly basis, and billed by the Company on a monthly basis of $6.3511 per 1,000 gallons. *
Meter Readings:	The Company shall attempt to secure an actual meter reading for each customer on a monthly basis.
Taxes:	Any applicable Federal, State, or local taxes computed on billing basis shall be added as separate items in rendering each bill.
Late Charges:	Billings will be made and distributed at monthly intervals. Bills will be rendered net, bearing the last date on which payment will then be considered delinquent. The period after which payment will then be considered delinquent is 21 days after rendition of the bill. A charge of $5.00 or three percent (3%) per month times the unpaid balance, whichever is more, will be added to delinquent amounts. *

* Indicates new rate or text
\+ Indicates change

Issue Date: May 27, 2021 (Month /Day/Year) Effective Date: June 26, 2021 (Month /Day/Year)

ISSUED BY Carl R. Mills, 209 Falling Leaf Court, Branson West, MO 65737
Name and Title of Issuing Officer Mailing Address

Disposition Agreement Attachment H

Customer Experience Department Report

REPORT OF CUSTOMER SERVICE AND BUSINESS OPERATIONS REVIEW

ANY INFORMATION CONTAINED IN

THIS REPORT IS SUBJECT TO CHANGE

Customer Experience Department

Small Company Rate Increase Request

Case No. WR-2021-0177

Carl R. Mills

The purpose of the Customer Experience Department ("CXD") is to investigate and make recommendations to the Commission on issues related to customer experience and customer expectations, which include promoting and encouraging efficient and effective utility management and customer service. These objectives contribute to the Commission's overall mission to ensure that Missourians receive safe and reliable utility service at just, reasonable, and affordable rates. The objectives of this review are to document and analyze the management control processes, procedures, and practices used by Carl R. Mills to ensure that its customers' service needs are met and to make recommendations, where appropriate, by which the Company may improve the quality of services provided to its customers. The findings of this review will also provide the Commission with information regarding the Company's customer service and business operations.

The scope of this review focuses on processes, procedures, and practices related to:

- Customer Billing
- Payment Remittance
- Credit and Collections
- Complaints and Inquiries
- Customer Communication

The CXD Staff examined the Company's tariffs, Commission complaint and inquiry records, public comments and other documentation related to the Company's customer service and business operations. In preparation of this report, the CXD Staff submitted initial data requests to the Company on January 1, 2021. Staff also submitted follow- up requests on February 16, 2021.

Overview

The Company's office is located at 209 Falling Leaf Court, Branson West, Missouri 65737. This is the owner's residence and, while there are no set hours of operation, the Company indicates it responds to customers' requests at all times. Customers are provided with two contact numbers. One number is for information or emergencies and a different number is for information regarding billing questions.

The Company provides water service to Mr. Mills, who is the owner, and six other customers in Branson West, Missouri.

Customer Billing And Payment Remittance

Carl Mills owns the Company and, in the past, had billed customers in conjunction with their annual homeowner's assessment. As a result of Case No. WA-2018-0370, the Company was granted a Certificate of Convenience and Necessity (CCN) and became a regulated utility effective November 8, 2019. The Company now operates under tariffs approved by the Commission in that case. These tariffs require a quarterly flat billing of $289.68.

Mr. Mills had indicated in the CCN case that he wished to turn over the operations of the Company to a third party. However, he later indicated to Staff that he had difficulty with some of the third parties he had employed. In response to Staff data requests, the Company responded that since mid-November, 2019, Mr. Mills was being assisted in carrying out the business operations of the Company by two volunteers, ** [redacted] ** assists in daily matters of the office while ** [redacted] ** creates and sends quarterly bills to customers. He also receives, records and deposits payments, as well as writing checks for invoices. The Company has not maintained any time records to document the amount of time being volunteered. In response to Staff data requests, it was estimated that ** [redacted] ** volunteers approximately 150 hours a year and ** [redacted] ** volunteers 60 hours a year. Both individuals estimate they have each volunteered an additional 80 plus hours connected with the rate case related activities.

The Company is utilizing a bill format that was developed in November 2019 and meets the requirements of 20 CSR 4240-13.020(9) Service and Billing Practices for Residential Customers of Electric, Gas, Sewer and Water Utilities. Staff reviewed sample bills for quarterly water service

sent to the six customers for the quarter of April 1, 2020 to June 30, 2020. Bills include the quarterly charge of $289.68 and are mailed approximately two weeks after the end of the quarter. Customers are given 21 days in which to pay their bill. Late fees have not been charged.

At this time, all customers have paid their bills by check but the Company will also accept cash. Customers can either mail their payments or bring them to the office.

Credit and Collections

The Company stated that the customers have paid their bills and they have not had to take any collection actions in the past. After the CCN was granted, the Company held a Homeowners Association meeting to share information regarding the revised billing for water service. The Company developed a Customer Water Service Agreement to be utilized along with their brochure to inform its customers of the new rates as well as payment due dates. This contract was shared with homeowners at a December 12, 2019 meeting. The first bill received after the Commission's Order in WA-2018-0370 for a period of December 18 to December 31, 2019 was prorated and was $45.06. Subsequent quarterly bills will be $289.63. Customers are given 21 days from their receipt of the bill to pay. After that time, a late fee of $5 or 3% of the balance overdue may be assessed. The Company has not assessed any deposits in the past and does not intend to do so in the future.

Customer Communication

The Company utilizes emails and Homeowner Association meetings to communicate various information to customers. As a result of the Commission Order in WA-2018-0370, a Company brochure detailing rights and responsibilities required by Commission Rule 20 CSR 4240-13.040 was developed and provided to customers. CXD Staff reviewed the brochure and it complies with the applicable Commission rules.

There is not a summary log of customer complaints and inquiries. CXD is not aware of any recent informal customer complaints against the Company, although there is a formal complaint recently filed and pending.

Findings, Conclusions, and Recommendation

After a review of the customer service operations at Carl R. Mills Water, the CXD Staff has two issues that prompted recommendations. The information presented in this section focuses on the two issues that require Company management's attention:

- Customer Complaint Log
- Use of Time Sheets

Customer Complaint Log

The Company does not keep a record of customer contacts and any complaints it receives. While the CXD Staff does understand that there are only six paying customers on the system at this time, it is important to maintain records of the number and types of complaints it receives. Commission Rule 20 CSR 4240-13.040(5) states "A utility shall maintain records on its customers for at least two (2) years which contains all information concerning…(B) The number and general description of complaints registered with the utility;…"

The log of customer contacts would enable the Company to meet the Commission rule requirement as well as provide a history of customer complaints and issues and how they were resolved.

THE CXD STAFF RECOMMENDS THAT COMPANY MANAGEMENT:

Develop and implement a process to ensure all customer complaints received by Company personnel are documented and maintained for at least two (2) years.

Use of Time Sheets

The Company is presently utilizing volunteers to conduct a number of customer service functions such as billing and payment posting and does not keep any type of time records. In order to have an accurate assessment of the costs necessary to operate the Company, it is necessary to maintain some type of record of time spent to conduct Company functions, even if these are presently being conducted using volunteers. In addition, the owner presently continues to perform specific functions at the Company, although he has indicated a desire to decrease his involvement in daily operations. Time records will assist the Company in determining future needs for personnel.

THE CXD STAFF RECOMMENDS THAT COMPANY MANAGEMENT:

Develop and utilize time sheets to document all work activities performed for the Company.

Disposition Agreement Attachment I
Water and Sewer Report

WATER AND SEWER DEPARTMENT
FIELD OPERATIONS AND TARIFF REVIEW

Introduction

Staff of the Water and Sewer Department conducted site inspections of the Carl R. Mills ("CRM") or ("Company") water system on March 5 and March 30, 2021. Staff also met with CRM customer, Dr. Morgan, on April 13, 2021. Dr. Morgan participated in the Local Public Hearing ("LPH") for Case No. WR-2021-0177, was granted intervention in this rate case, and has filed the formal complaint WC-2021-0223 against CRM.

This report provides the results of Staff's investigation of the CRM water system, including regulatory status, on-site inspections, water sampling meter reading requirements and other operational issues raised at the February 2, 2021, Local Public Hearing ("LPH") for this rate case. The other operational issues include alleged inadequate pressure and flow, poor water quality, and system design flaws.

Water service is provided to seven customers in one certificated service area in Stone County, Missouri. The service area is also known as Carriage Oaks Estates. There is a customer meter for each customer, however, meter readings are currently not used for billing purposes and there is no requirement from the Commission for CRM to read the meters. Prior to Case No. WA-2018-0370, the system was not a PSC-regulated utility. The current water rates consist of a flat customer charge of $289.68 per quarter.

According to information provided to Staff by CRM in Case No. WA-2018-0370, and observed by Staff in the field, the developed area of Carriage Oaks Estates consists of Phase I with eight (8) lots and Phase II with twenty-four (24) lots, for a total of thirty-two (32) lots. Of these 32 existing lots in the developed area of the subdivision, at present there are seven (7) lots upon which homes have been constructed and which are receiving water service.

The service area includes a hilltop and surrounding hillsides, with the water well and pump house located on one side of the hill and six homes, on lots 1 through 6 arranged along the crest of the hill. There is one home on combined lots 3A and 4A located on the other hillside, opposite the water well and pump house. Staff observed that the water service connection components are visible upon some of the remaining lots, and available for water connections to future new homes on those lots.

There are also approximately twenty-three (23) acres of additional unplatted land available that could be developed in the future. A proposed Phase III would be included within this undeveloped area and could add approximately twenty-three (23) additional lots. The water system was

apparently constructed with the intention of expanding it to providing service to a total of approximately 55 customers in all three development phases as described above.

During the March 5, 2021, inspection, Staff investigated the condition of the water system, and found that sometime prior to Staff's on-site inspection, the water system had experienced a low pressure event caused by a failed level switch. Staff was on-site when final repairs to the level switch were being made and the water system was fully pressurized. However, Staff was unable to observe the system under normal operation at that time.

A second on-site inspection of the water system was delayed until March 30, 2021, to allow for additional time for CRM to repair a booster pump. During the March 30 inspection, Staff observed the water system operating under normal operating conditions, observed the water system operation through two cycles of pressurizing the distribution system, and one distribution line flushing event. Staff also took one round of pressure readings at the seven homes.

On April 13, 2021, after meeting with Dr. Morgan at his home in Carriage Oaks Estates, Staff observed water system pressure at the water distribution system's air relief valve through one cycle of the water distribution system's normal operating pressure range.

Description of the Water System

The water system consists of a single well with current production capacity of fifty-five (55) gallons per minute ("gpm"), a master meter, a ground storage tank of an approximate volume of 35,000 gallons, two high service booster pumps that provide distribution system water pressure and six bladder type pressure tanks to normalize the distribution system pressure. There is a chlorination system that is used to disinfect the storage tank, high service pumps and distribution system in the event of a loss of pressure or water leak. The water is not routinely chlorinated.

The water main consists of 4-inch PVC pipe and is in place for all of the existing 32 lots in the developed area. The water main has a pressure gauge and air relief valve at its highest elevation, and a flushing valve at the end of the main. There are seven customer service lines and customer meters.

Regulatory Status of Water System

DNR classifies the CRM water system as a private water system. A private water system has less than 15 service connections or will serve an average of less than 25 individuals daily at least 60 days out of the year.[1] DNR does not permit or regulate the operation of private water systems.

[1] DNR PUB 98 Public Drinking Water Permits

The Missouri Department of Health and Senior Services ("DHSS") provides water testing services for private water systems. CRM has used these services, as provided locally by the Stone County Health Department, and plans to continue using them.

Although the current water system is considered a private water system, and not regulated by DNR, the original intent of the water system was to be part of a larger system that would serve up to 55 customers. From Staff's review of available records, it appears that an engineering report for the water system was submitted to DNR in 1998 and given the DNR Review No. 52270-98, with the Public Water System ("PWS") ID No. MO5031247 also issued.

Staff's search of DNR's Census of Missouri Public Water Systems by PWS ID No. found no results for the CRM system in the 2021 census and no results in the 2006 census, which is the earliest available census. These search results indicate that DNR declassified the CRM water system some time prior to the 2006 census.

By 2003, two homes had been constructed and with an additional five homes under construction; a second engineering report detailing an expansion of the distribution system to 33 lots was submitted to DNR (DNR Review No. 53224-03). Currently, the distribution system has been expanded to provide water to 32 lots, and seven homes have been constructed.

As a result of Case No. WA-2018-0370, CRM became regulated by the Missouri Public Service Commission ("Commission") as an investor owned utility ("IOU"). As an IOU regulated by the Commission, CRM is required to comply with the Commission's Report and Orders, regulations, and rules.

Water Quality Concerns

Comments were provided during the February 2, 2021, LPH concerning the lack of chlorination, iron content, and sediments in the water. The source of water for the system is a single well drilled to a depth of 810 feet with 580 feet of casing. The well has been certified by the DNR Division of Geology and Land Survey for use as a water supply to a public facility with a Certification number 199013.

Currently, CRM is not chlorinating the water. In response to Staff DR0059, CRM stated: "When the well was initially constructed in 1999, a DNR engineer who came to inspect the well, informed Mr. Mills that unless he had bacterial contamination, he did not have to chlorinate the water system. On Feb 26, 2021, Brent Daniels, our current well operator, communicated with Mr. Johnny O'Dell, the water specialist from the Springfield office of the MO DNR. Mr. O'Dell recommend we do not chlorinate the water unless there is e. coli contamination."

Staff discussions with personnel from DNR's southwest regional office confirms that Mills is not required to chlorinate the water, however, they did advise that the ground storage tank should be inspected and 30 mesh screen (window screen) be placed around the tank vent and overflow.

Staff recommends that CRM inspect the ground storage tank and if not present, install 30 mesh screen (window screen) be placed around the tank vent and overflow. CRM is to file in EFIS in this case evidence that the inspection and installation has been completed no later than 30 days after the effective date of Commission Order in this case.

Each house has a water filter for filtering sediment. In the past, these filters have been clogged with sediment and have changed from white to red indicating the presence of iron. Upon further discussion with a customer, it appears that the sedimentation problem has not occurred recently. Staff concludes that it is likely any sediment from the well is settling out in the ground storage tank, and no new construction or recent line breaks have introduced sediment to the distribution system. Also, CRM has flushed the water main after concerns were made which would remove any existing sediments in the distribution system.

Iron in drinking water can affect taste and appearance water and is usually considered a secondary characteristic that is not regulated by DNR. Sampling for iron is discussed in the next section.

Commission Ordered Water Sampling

In Staff DR No. 0046, Staff asked CRM, "With regard to the Commission Order for case WA-2018-0370, condition (i), did Mills take water samples from the water system on a six month basis and have them analyzed for bacterial contamination, chlorine residual and iron content? If yes, please provide copies of all laboratory reports. If no, please explain why not?"

In response to Staff DR No. 0046, CRM provided the laboratory results for two separate sampling events that occurred on May 14, 2020, and December 1, 2020. The water was tested for bacterial contamination by the Stone County Health Department. The results showed no bacterial contamination.

CRM did not provide water sample results for iron or chlorine, and provided no explanation for their absence. It is Staff's understanding that CRM does not routinely chlorinate the water making testing for chlorine moot. However, to date, Staff has no evidence that CRM had the water analyzed for iron per the Commission's Order.

It is Staff's recommendation that CRM take water samples for laboratory analysis at least twice per year at approximately six-month intervals for bacterial contamination, and iron content, such sample to begin within 30 days of the effective date of the Report and Order for this case. The laboratory results will be filed in EFIS as a confidential document to this rate case no later than 10 calendar days after CRM receives the laboratory results.

Meter Reading and Usage Data

Although customer meters exist, at present they are neither being consistently read nor used for billing. In the *Staff Recommendation*, filed in Case No. WA-2018-0370, Staff suggested that Mr. Mills start reading customer meters at least quarterly.[2] This suggestion was not part of Staff's recommendations to the Commission, and there is no Commission Order from the WA-2018-0370 or WC-2017-0037 cases requiring Mr. Mills to read customer meters.[3, 4, 5]

The Transcript of Proceedings from the Public Hearing, on February 2, 2021, for this proceeding, provides testimony from Dr. Morgan asserting that in discussions, Mills agreed to take customer meter readings in order to establish a volumetric rate in the future.[6] From the details of the discussion that Dr. Morgan provided in response to Staff DR No. 0052, it appears that this discussion was an off-the–record discussion between the parties of the case, and may have been part of confidential settlement discussions from Case No. WA-2018-0370. Agreements made off-the-record, or during failed settlement discussions are not binding for any party.

CRM did provide some monthly master meter and customer meter readings in response to Staff Data Request Nos. 0051 and 0060. As stated earlier, in Case No. WA-2018-0370, Staff suggested that Mr. Mills start reading customer meters at least quarterly. Two reasons for Staff's suggestion was to collect water usage for possible metered rates in the future, and to analyze distribution system water loss.[7]

Staff recommends that CRM read the one master meter and the seven customer meters on a monthly basis and enter this information on a spreadsheet. The spreadsheet is to be designed to calculate each customer's monthly water usage, reconcile total customer usage with water extracted from the well using master meter readings, and identify any lost, unaccounted for, or unmetered water. A completed spreadsheet with calculations intact is to be filed in EFIS as a confidential document to this rate case no later than 10 calendar days after the meters have been read. After twelve consecutive months of successfully completed filings as determined by Staff, CRM may request amending the frequency of reporting this data to the Commission. CRM will promptly notify any customer of any apparent abnormal water

[2] Case No. WA-2018-0370, Staff's Memorandum, Recommendation of Approval on Amended Application, page 3.
[3] Case No. WA-2018-0370, Staff's Memorandum, Recommendation of Approval on Amended Application, pages 7 and 8.
[4] Case No. WA-2018-0370, Commission Report and Order, pages 14 and 15.
[5] Case No WC-2017-0037, Commission Report and Order, page 15.
[6] The Transcript of Proceedings from the Public Hearing, on February 2, 2021, For Case No. WR-2021-0177 page 11, line 23 through page 12, line 2.
[7] Case No. WA-2018-0370, Staff's Memorandum, Recommendation of Approval on Amended Application, page 3.

usage, and upon request by a CRM customer, CRM will provide, within 7 calendar days of the request, the requesting customer's usage data generated from this recommendation.

Staff Observations at the Pump House

On March 5, 2021, Staff met with volunteer staff during its inspection of the CRM water system. Upon arrival, Staff was informed that the water system was shut down because the 35,000-gallon ground storage tank's level switch had failed. This switch turns on the well pump when the water level in the storage tank is low and turns off the well pump when the tank is full. The booster pumps draw water from the storage and feeds the distribution system. Once the level switch failed the booster pumps drained the storage tank and then the water system shut down. Staff did not leave the site until the final repairs were made and the water system was fully pressurized. Staff observed that the booster pumps properly turned off when the pressure at the pump's discharge reached 60 pounds per square inch ("psi").

During the inspection, Staff observed that the well house was locked and is in adequate shape. The well, well-house, and storage tank are located at a lower elevation than most of the customers' houses. The well is finished above grade and is within the well-house. The aboveground piping inside the well house is a mix of 2, 3, and 4-inch diameter, polyvinyl chloride ("PVC"), painted steel, and galvanized steel piping.[8] The piping showed some signs of past leakage but the well-house was dry at the time of inspection. The pressure bladder tanks appear to be recently installed and are in good condition. Staff observed exposed electrical wiring in a junction box.

The storage tank appeared to be in fair condition; however, the tank has not been inspected since its installation approximately 7 years ago.

Comments were provided during the February 2, 2021, LPH concerning system design flaws and the possession of documents supporting these concerns. In response to Staff DRs 0056, 0057, and 0058 Staff received engineering plans and specifications, engineering calculations and correspondence between the engineer and DNR. Staff has reviewed these documents, inspected the water system, and discussed these concerns with the customer.

The specific concern is that a section of 2-inch diameter PVC pipe approximately eight feet long that connects the 3-inch diameter steel booster pump discharge manifold to the 4-inch diameter water main is limiting the flow of water into the water main.

Staff agrees that more water can flow through a 4-inch diameter pipe or a 3-inch diameter pipe than a 2-inch diameter pipe. Staff agrees that, given the current piping configuration, the potential exists for restricted water flow. But Staff is uncertain that: i) the condition exists in current operations, and ii) if the condition does exists, that it is an unacceptable, limiting factor for providing water service to seven houses that needs correction.

[8] All pipe sizes are nominal and were determined by visual observation.

Staff recommends that CRM retain a third-party professional engineering firm to evaluate the water system, as currently configured and operated to provide water service to the existing seven homes including the demand for lawn irrigation at each home, and system flushing. CRM will file the Engineering Report in EFIS in this Case no later than eight months after the effective date of the Commission Order in this case.

Staff observed the flushing valve at the end of the distribution line and discussed the flushing procedure with Mr. Mills, however the distribution line was not flushed during the inspection.

Staff Observations of Distribution System Water Pressure

On March 30, 2021, Staff again met with volunteer staff during its inspection of the CRM water system. The water system was operating normally and Staff observed the distribution system operation through two cycles of pressurizing the distribution system. The distribution system is that part of the water system that is under pressure and consists of the two high service booster pumps that provide water and pressure, six bladder-type pressure tanks that provide pressurized water storage, a 4-inch diameter water main, seven 1-inch diameter customer service lines and seven customer meters. For water systems that rely on booster pumps and bladder type pressure tanks for water pressure, the distribution system pressure normally varies between a high and a low-pressure set point. At the low-pressure set point the booster pump turns on, filling the bladder type pressure tanks and increasing the pressure in the distribution system. When the distribution system pressure reaches the high-pressure set point the booster turns off. As customers use water, the bladder-type pressure tanks deflate and the distribution system's pressure drops. Once the low-pressure set point is reached, the booster pumps start and the cycle repeats. Staff determined the low-pressure set point to be 45 pounds per square inch ("psi") and the high pressure set point to be 63 psi as read by the pressure gage on the booster pump's discharge manifold at the well house. The 18 psi difference between the low and high set points is the normal operating pressure range for the system.

Because of the elevation changes in the distribution system, at any given moment, pressure readings at the pump house will not be the same as the pressure at various points along the water main or customer service lines. Water pressure will fall with an increase in elevation. Most of the water main that is in use is either at a higher elevation or roughly the same elevation of the pump house, so the water pressure inside the water main is typically less than or equal to the water pressure at the pump house.

On April 13, 2021, Staff observed water pressure at the water main's air relief valve through one cycle of the water distribution system's pressurization. This air relief valve is located at the highest elevation of the water distribution system (lowest pressure) and automatically releases any air trapped in the main. The air relief valve is located in a below grade valve box on Lot 1 facing Highway DD. Inside the valve box is a shutoff valve, a pressure gage for reading water pressure,

and the air relief valve. Staff determined the lowest operating pressure to be 22 psi and the highest operating pressure to be 40 psi. The difference between the low and high pressure readings at the air relief valve is 18 psi, the same operating pressure range observed at the well house which is expected.

Although CRM is not regulated by DNR, the system was originally designed to meet DNR's standards for public water supplies that were in effect at the time the system was constructed. The 1982 Standards for Non-Community Public Water Supplies requires the system to maintain a minimum pressure of 20 psi at all points in the distribution system under all conditions of flow.[9] This minimum pressure of 20 psi in the distribution system carries over into the current DNR design guide for drinking water systems and is a practical minimum operating pressure for household appliances such as washing machines and dishwashers.

Staff recommends that CRM maintain a minimum pressure of 20 psi at all points in the distribution system under all flow conditions.

Staff Observations of House Water Pressure

Staff also took one round of pressure readings at the seven homes. Since the pressure in the distribution system ranges between a low and high pressure, these readings represent a snapshot in time instead of continuous conditions. In addition, the houses on lots 1, 2, 3, and 4 are located at the highest points in the service territory and each house has a small booster pump and bladder tank inside the house to increase the house's water pressure. Staff took pressure readings from outside water spigots, so pressure readings from lots 1, 2, 3 and 4 represent the house's internal water pressure, and is not directly related to the distribution system pressure. The houses on lots 5, 6, and 3A/4A do not have booster pumps or bladder tanks inside the houses so pressure readings from those houses are directly related the distribution system pressure. The pressure readings were read in pounds per square inch ("psi") and are as follows:

Lot 1: 60 psi
Lot 2: 38 psi
Lot 3: 48 psi
Lot 4: 42 psi
Lot 5: 54 psi
Lot 6: 48 psi
Lot 3A/4A: 48 psi

All of these pressure readings are above the 20 psi minimum pressure guideline and Staff saw no indication of a low pressure condition (<20 psi) at the time of these readings.

Staff Observations of Water Main Flushing

[9] pub979.pdf (mo.gov)

During the March 30 inspection, Staff requested that CRM personnel operate the flushing valve at the end of the main distribution line. The purpose of the flushing request was to accelerate the typical cycle frequency of the booster pump in order to observe the well house operational pressure range. While CRM personnel operated the flushing valve, Staff was at the well house recording the pressure gauge readings. Staff and CRM personnel used cell phones to communicate and coordinate the flushing valve operation. CRM personnel slowly opened the flush valve and flushed water from the water main. When the booster pump at the well house cycled on, Staff recorded the pressure gauge reading and instructed CRM to close the flush valve. When the booster pump cycled off, Staff recorded that pressure gauge reading. The well house operational pressure range was recorded at 45 to 63psi.

Based on Staff's observations of the water main flushing, and customer comments provided at the February 2nd LPH, and to Staff, Staff recommends that CRM develop a written flushing procedure and install additional pressure gages and valves as necessary to ensure that CRM maintains a minimum pressure of 20 psi at all points in the distribution system during a water main flush, and that all customers are notified of the date, time and approximate duration of the flush. CRM is to file this procedure a public document in EFIS no later than 30 days after the effective date of the Commission's Report and Order for this Case.

Tariff Review

Staff reviewed CRM's current tariff. CRM's current tariff became effective December 18, 2019. The only revision that Staff recommends is to cancel PSC MO No. 1 Original Sheet No. 4 and replace it with PSC MO No. 1, 1st Revised Sheet No. 4.

Rate Design

CRM's current rate design was approved by the Commission in Case No. WA-2018-0370. In that case the Commission approved a quarterly rate of $289.68. Although not ordered by the commission, Staff also recommended that Mr. Mills begin reading customer meters at least quarterly, read the master meter located in the well house at least weekly, and record all meter readings.

In this case CRM did not propose metered rates, but did provide meter readings in response to Staff Data Request 0051 and 0060. With this data, Staff was able to calculate a monthly volumetric rate and customer charge. Staff recommends that the Commission approve Staff's rate design detailed in Attachment E to the Disposition Agreement. Staff's rate design is just and reasonable and will allow CRM to recover its revenue requirement approved in this case.

Staff Conclusions and Recommendations

Staff's investigation into CRM's operations, review of the formal complaint pending before the Commission, response to comments made at the February 2, 2021, LPH, and review of CRM's rate design analysis, and recommendations listed below, will allow the Company to continue to provide safe and reliable service and the opportunity for the Company to recover its revenue requirement.

Staff recommends that the Commission approve the following recommendations:

1. Staff recommends that CRM inspect the ground storage tank and if not present, install 30 mesh screen (window screen) around the tank vent and overflow. CRM is to file in EFIS in this case evidence that the inspection and installation has been completed no later than 30 days after the effective date of Commission Order in this case.

2. It is Staff's recommendation that CRM take water samples for laboratory analysis at least twice per year at approximately six-month intervals for bacterial contamination, and iron content, such sample to begin within 30 days of the effective date of the Report and Order for this case. The laboratory results, will be filed in EFIS as a confidential document to this rate case no later than 10 calendar days after Mills receives the laboratory results.

3. Staff recommends that CRM read the one master meter and the seven customer meters on a monthly basis and enter this information on a spreadsheet. The spreadsheet is to be designed to calculate each customer's monthly water usage, reconcile total customer usage with water extracted from the well using master meter readings, and identify any lost, unaccounted for, or unmetered water. A completed spreadsheet with calculations intact is to be filed in EFIS as a confidential document to this rate case no later than 10 calendar days after the meters have been read. After twelve consecutive months of successfully completed filings as determined by Staff, CRM may request amending the frequency of reporting this data to the Commission. CRM will promptly notify any customer of any apparent abnormal water usage, and upon request by a CRM customer, CRM will provide, within 7 calendar days of the request, the requesting customer's usage data generated from this recommendation.

4. Staff recommends that CRM retain a third party professional engineering firm to evaluate the water system, as currently configured and operated, to provide water service to the existing seven homes including the demand for lawn irrigation at each home, and system flushing. Staff also recommends CRM file the Engineering Report in EFIS in this Case no later than 8 months after the effective date of the Commission Order in this case.

5. Staff recommends that CRM maintain a minimum pressure of 20 psi at all points in the distribution system under all flow conditions.

6. Based on Staff's observations of the water main flushing, and customer comments provided at the February 2nd LPH, and to Staff, Staff recommends that CRM develop a written flushing procedure and install additional pressure gages and valves as necessary to ensure that CRM maintains a minimum pressure of 20 psi at all points in the distribution system during a water main flush, and that all customers are notified of the date, time and approximate duration of the flush. CRM is to file this procedure a public document in EFIS no later than 30 days after the effective date of the Commission's Report and Order for this Case.

7. Staff recommends that CRM bill its customers on a monthly basis using a customer charge of $68.31 and a volumetric charge of $6.3511 per 1,000 gallons, beginning the effective date of tariff sheet PSC MO No. 1, 1st Revised Sheet No. 4.

Disposition Agreement Attachment J
Summary of Case Events

Carl R. Mills
Case #WR-2021-0177
Summary of Case Events

Date Filed:	December 21, 2020
Day 120:	April 20, 2021
Extension?	No
Amount Requested Water:	$0.00
Amount Agreed Upon Water:	($161)
Item(s) Driving Rate Decrease:	The current rates have been active and unchanged since last Case in 2015 (WA-2018-0370)
Number of Customers:	**7** water customers
Return on Equity:	6.73%
Assessment Current:	**Will be assessed next fiscal year.**
Annual Reports Filed:	No
Other Open Cases before Commission:	Yes. Case No. WC-2021-0223
Status with Secretary of State:	Not needed as the utility is owned by Mr. Mills.
DNR Violations:	None
Significant Service/Quality Issues:	None

STANDARD &POOR'S

RATINGSDIRECT®

May 27, 2009

Criteria | Corporates | General:

Criteria Methodology: Business Risk/Financial Risk Matrix Expanded

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Table Of Contents

Criteria | Corporates | General:

Criteria Methodology: Business Risk/Financial Risk Matrix Expanded

*(**Editor's Note:** In the previous version of this article published on May 26, certain of the rating outcomes in the table 1 matrix were missated. A corrected version follows.)*

Standard & Poor's Ratings Services is refining its methodology for corporate ratings related to its business risk/financial risk matrix, which we published as part of 2008 Corporate Ratings Criteria on April 15, 2008, on RatingsDirect at www.ratingsdirect.com and Standard & Poor's Web site at www.standardandpoors.com.

This article amends and supersedes the criteria as published in Corporate Ratings Criteria, page 21, and the articles listed in the "Related Articles" section at the end of this report.

This article is part of a broad series of measures announced last year to enhance our governance, analytics, dissemination of information, and investor education initiatives. These initiatives are aimed at augmenting our independence, strengthening the rating process, and increasing our transparency to better serve the global markets.

We introduced the business risk/financial risk matrix four years ago. The relationships depicted in the matrix represent an essential element of our corporate analytical methodology.

We are now expanding the matrix, by adding one category to both business and financial risks (see table 1). As a result, the matrix allows for greater differentiation regarding companies rated lower than investment grade (i.e., 'BB' and below).

Table 1

Business And Financial Risk Profile Matrix

Business Risk Profile	Financial Risk Profile					
	Minimal	Modest	Intermediate	Significant	Aggressive	Highly Leveraged
Excellent	AAA	AA	A	A-	BBB	--
Strong	AA	A	A-	BBB	BB	BB-
Satisfactory	A-	BBB+	BBB	BB+	BB-	B+
Fair	--	BBB-	BB+	BB	BB-	B
Weak	--	--	BB	BB-	B+	B-
Vulnerable	--	--	--	B+	B	CCC+

These rating outcomes are shown for guidance purposes only. Actual rating should be within one notch of indicated rating outcomes.

The rating outcomes refer to issuer credit ratings. 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.

Business Risk/Financial Risk Framework

Our corporate analytical methodology organizes the analytical process according to a common framework, and it divides the task into several categories so that all salient issues are considered. The first categories involve fundamental business analysis; the financial analysis categories follow.

Our ratings analysis starts with the assessment of the business and competitive profile of the company. Two companies with identical financial metrics can be rated very differently, to the extent that their business challenges and prospects differ. The categories underlying our business and financial risk assessments are:

Business risk

- Country risk
- Industry risk
- Competitive position
- Profitability/Peer group comparisons

Financial risk

- Accounting
- Financial governance and policies/risk tolerance
- Cash flow adequacy
- Capital structure/asset protection
- Liquidity/short-term factors

We do not have any predetermined weights for these categories. The significance of specific factors varies from situation to situation.

Updated Matrix

We developed the matrix to make explicit the rating outcomes that are typical for various business risk/financial risk combinations. It illustrates the relationship of business and financial risk profiles to the issuer credit rating.

We tend to weight business risk slightly more than financial risk when differentiating among investment-grade ratings. Conversely, we place slightly more weight on financial risk for speculative-grade issuers (see table 1, again). There also is a subtle compounding effect when both business risk and financial risk are aligned at extremes (i.e., excellent/minimal and vulnerable/highly leveraged.)

The new, more granular version of the matrix represents a refinement--not any change in rating criteria or standards--and, consequently, holds no implications for any changes to existing ratings. However, the expanded matrix should enhance the transparency of the analytical process.

Financial Benchmarks

Table 2

Financial Risk Indicative Ratios (Corporates)			
	FFO/Debt (%)	**Debt/EBITDA (x)**	**Debt/Capital (%)**
Minimal	greater than 60	less than 1.5	less than 25
Modest	45-60	1.5-2	25-35
Intermediate	30-45	2-3	35-45
Significant	20-30	3-4	45-50
Aggressive	12-20	4-5	50-60
Highly Leveraged	less than 12	greater than 5	greater than 60

How To Use The Matrix--And Its Limitations

The rating matrix indicative outcomes are what we typically observe--but are not meant to be precise indications or guarantees of future rating opinions. Positive and negative nuances in our analysis may lead to a notch higher or lower than the outcomes indicated in the various cells of the matrix.

In certain situations there may be specific, overarching risks that are outside the standard framework, e.g., a liquidity crisis, major litigation, or large acquisition. This often is the case regarding credits at the lowest end of the credit spectrum--i.e., the 'CCC' category and lower. These ratings, by definition, reflect some impending crisis or acute vulnerability, and the balanced approach that underlies the matrix framework just does not lend itself to such situations.

Similarly, some matrix cells are blank because the underlying combinations are highly unusual--and presumably would involve complicated factors and analysis.

The following hypothetical example illustrates how the tables can be used to better understand our rating process (see tables 1 and 2).

We believe that Company ABC has a satisfactory business risk profile, typical of a low investment-grade industrial issuer. If we believed its financial risk were intermediate, the expected rating outcome should be within one notch of 'BBB'. ABC's ratios of cash flow to debt (35%) and debt leverage (total debt to EBITDA of 2.5x) are indeed characteristic of intermediate financial risk.

It might be possible for Company ABC to be upgraded to the 'A' category by, for example, reducing its debt burden to the point that financial risk is viewed as minimal. Funds from operations (FFO) to debt of more than 60% and debt to EBITDA of only 1.5x would, in most cases, indicate minimal.

Conversely, ABC may choose to become more financially aggressive--perhaps it decides to reward shareholders by borrowing to repurchase its stock. It is possible that the company may fall into the 'BB' category if we view its financial risk as significant. FFO to debt of 20% and debt to EBITDA 4x would, in our view, typify the significant financial risk category.

Still, it is essential to realize that the financial benchmarks are guidelines, neither gospel nor guarantees. They can vary in nonstandard cases: For example, if a company's financial measures exhibit very little volatility, benchmarks may be somewhat more relaxed.

Moreover, our assessment of financial risk is not as simplistic as looking at a few ratios. It encompasses:

- a view of accounting and disclosure practices;
- a view of corporate governance, financial policies, and risk tolerance;
- the degree of capital intensity, flexibility regarding capital expenditures and other cash needs, including acquisitions and shareholder distributions; and
- various aspects of liquidity--including the risk of refinancing near-term maturities.

The matrix addresses a company's standalone credit profile, and does not take account of external influences, which would pertain in the case of government-related entities or subsidiaries that in our view may benefit or suffer from affiliation with a stronger or weaker group. The matrix refers only to local-currency ratings, rather than foreign-currency ratings, which incorporate additional transfer and convertibility risks. Finally, the matrix does not apply to project finance or corporate securitizations.

Related Articles

Industrials' Business Risk/Financial Risk Matrix--A Fundamental Perspective On Corporate Ratings, published April 7, 2005, on RatingsDirect.

STANDARD &POOR'S

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November 30, 2007

U.S. Utilities Ratings Analysis Now Portrayed In The S&P Corporate Ratings Matrix

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U.S. Utilities Ratings Analysis Now Portrayed In The S&P Corporate Ratings Matrix

The electric, gas, and water utility ratings ranking lists published today by Standard & Poor's U.S. Utilities & Infrastructure Ratings practice are categorized under the business risk/financial risk matrix used by the Corporate Ratings group. This is designed to present our rating conclusions in a clear and standardized manner across all corporate sectors. Incorporating utility ratings into a shared framework to communicate the fundamental credit analysis of a company furthers the goals of transparency and comparability in the ratings process. Table 1 shows the matrix.

Table 1

Business Risk/Financial Risk

	Financial Risk Profile				
Business Risk Profile	**Minimal**	**Modest**	**Intermediate**	**Aggressive**	**Highly leveraged**
Excellent	AAA	AA	A	BBB	BB
Strong	AA	A	A-	BBB-	BB-
Satisfactory	A	BBB+	BBB	BB+	B+
Weak	BBB	BBB-	BB+	BB-	B
Vulnerable	BB	B+	B+	B	B-

The utilities rating methodology remains unchanged, and the use of the corporate risk matrix has not resulted in any changes to ratings or outlooks. The same five factors that we analyzed to produce a business risk score in the familiar 10-point scale are used in determining whether a utility possesses an "Excellent," "Strong," "Satisfactory," "Weak," or "Vulnerable" business risk profile:

- Regulation,
- Markets,
- Operations,
- Competitiveness, and
- Management.

Regulated utilities and holding companies that are utility-focused virtually always fall in the upper range ("Excellent" or "Strong") of business risk profiles. The defining characteristics of most utilities--a legally defined service territory generally free of significant competition, the provision of an essential or near-essential service, and the presence of regulators that have an abiding interest in supporting a healthy utility financial profile--underpin the business risk profiles of the electric, gas, and water utilities.

As the matrix concisely illustrates, the business risk profile loosely determines the level of financial risk appropriate for any given rating. Financial risk is analyzed both qualitatively and quantitatively, mainly with financial ratios and other metrics that are calculated after various analytical adjustments are performed on financial statements prepared under GAAP. Financial risk is assessed for utilities using, in part, the indicative ratio ranges in table 2.

Table 2

Financial Risk Indicative Ratios - U.S. Utilities

(Fully adjusted, historically demonstrated, and expected to consistently continue)

	Cash flow		Debt leverage
	(FFO/debt) (%)	**(FFO/interest) (x)**	**(Total debt/capital) (%)**
Modest	40 - 60	4.0 - 6.0	25 - 40
Intermediate	25 - 45	3.0 - 4.5	35 - 50
Aggressive	10 - 30	2.0 - 3.5	45 - 60
Highly leveraged	Below 15	2.5 or less	Over 50

The indicative ranges for utilities differ somewhat from the guidelines used for their unregulated counterparts because of several factors that distinguish the financial policy and profile of regulated entities. Utilities tend to finance with long-maturity capital and fixed rates. Financial performance is typically more uniform over time, avoiding the volatility of unregulated industrial entities. Also, utilities fare comparatively well in many of the less-quantitative aspects of financial risk. Financial flexibility is generally quite robust, given good access to capital, ample short-term liquidity, and the like. Utilities that exhibit such favorable credit characteristics will often see ratings based on the more accommodative end of the indicative ratio ranges, especially when the company's business risk profile is solidly within its category. Conversely, a utility that follows an atypical financial policy or manages its balance sheet less conservatively, or falls along the lower end of its business risk designation, would have to demonstrate an ability to achieve financial metrics along the more stringent end of the ratio ranges to reach a given rating.

Note that even after we assign a company a business risk and financial risk, the committee does not arrive by rote at a rating based on the matrix. The matrix is a guide--it is not intended to convey precision in the ratings process or reduce the decision to plotting intersections on a graph. Many small positives and negatives that affect credit quality can lead a committee to a different conclusion than what is indicated in the matrix. Most outcomes will fall within one notch on either side of the indicated rating. Larger exceptions for utilities would typically involve the influence of related unregulated entities or extraordinary disruptions in the regulatory environment.

We will use the matrix, the ranking list, and individual company reports to communicate the relative position of a company within its business risk peer group and the other factors that produce the ratings.