Exhibit No.:

Issue: Partial Disposition

Agreement;

Revenue Requirement; Net Rate Base; Carrying Costs;

First Round Allocation; First Round Payroll; Accounting costs Bad Debt Expenses

Property Taxes

Witness: Paul R. Harrison
Sponsoring Party: MoPSC Staff
Type of Exhibit: Direct Testimony
Case No.: SR-2016-0202

Date Testimony Prepared: September 30, 2016

MISSOURI PUBLIC SERVICE COMMISSION

COMMISSION STAFF DIVISION AUDITING DEPARTMENT

DIRECT TESTIMONY

OF

PAUL R. HARRISON

Raccoon Creek Utility Operating Company, Inc.

CASE NO. SR-2016-0202

Jefferson City, Missouri September 2016



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1		DIRECT TESTIMONY
2		\mathbf{OF}
3		PAUL R. HARRISON
4	F	RACCOON CREEK UTILITY OPERATING COMPANY, INC.
5		CASE NO. SR-2016-0202
6	Q.	Please state your name and business address.
7	A.	Paul R. Harrison, P. O. Box 360, Jefferson City, Missouri 65102.
8	Q.	By whom are you employed and in what capacity?
9	A.	I am a Regulatory Auditor with the Missouri Public Service Commission
10	("PSC" or "C	ommission").
11	BACKGROU	UND OF WITNESS
12	Q.	Please describe your educational background.
13	A.	I graduated from Park College, Kansas City, Missouri, where I earned a
14	Bachelor of S	cience degree in Accounting and Management in July of 1995. I also earned an
15	Associate deg	gree in Missile Technology from the Community College of the Air Force in
16	June 1990.	
17	Q.	Please describe your work background prior to working at the Commission.
18	A.	Prior to coming to work at the Commission in January of 2000, I was the
19	manager for T	Tool Warehouse Inc. for four and half years. As the manager, I supervised eight
20	sales represer	ntatives and managed merchandise and inventory that was valued in excess of
21	\$1.5 million.	

Prior to that, I was in the United States Air Force (USAF) for 23 years. During my career in the USAF, I was assigned many different duty positions with various levels of responsibility. I retired from active duty on May 1, 1994 as Superintendent of the 321st Strategic Missile Wing (SMW) Missile Mechanical Flight. In that capacity, I supervised 95 missile maintenance technicians and managed assets valued in excess of \$50 million.

- Q. Please describe your duties while employed by the Commission.
- A. My duties at the Commission include being assigned lead auditor on formal and informal rate cases and performing audits of the books and records of regulated public utilities under the jurisdiction of the PSC, in conjunction with other Commission Staff ("Staff") members. In that capacity, I am required to prepare testimony and serve as a Staff expert witness on cases involving the accounting and auditing issues that I am assigned.
 - Q. Have you previously filed testimony before this Commission?
- A. Yes, Schedule PRH-d1 provides a more detailed description of my education and work background, lists the cases in which I participated and lists the formal and informal case issues that I have completed during my tenure here at the Commission.
- Q. Did you make an examination and analysis of the books and records of Raccoon Creek Utility Operating Company, Inc. ("Raccoon Creek" or "Company") in regard to the issues raised in this case?
- A. Yes, in conjunction with other members of the Staff. We specifically examined information provided by the Company in response to Staff's data requests, as well as the Company's general ledger, vendor operating contracts and bids, Company workpapers, Raccoon Creek's current effective tariffs and Raccoon Creek's annual reports. In addition,

we conducted several meetings with the Company and completed a tour of Raccoon Creek sewer facilities in order to obtain a better understanding of the operations of the Company.

EXECUTIVE SUMMARY

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- Q. What were the primary responsibilities assigned to you in Case No. SR-2016-0202?
- A. My primary areas of responsibility for this case, in conjunction with other Staff members, was to develop a cost of service in order to determine Raccoon Creek's revenue requirement so that new proposed rates could be established for Raccoon Creek sewer customers. Additionally, I was assigned as Lead Auditor in this case.
 - Q. What is the purpose of your testimony for this case?
- A. The purpose of my testimony in this case is to sponsor the Staff and Company *Partial Disposition Agreement* that was filed on August 30, 2016 in this rate case proceeding. In addition, I will be sponsoring Staff's proposed revenue requirement, test year and update period, and presenting Staff's positions on some of the issues that Staff, The Office of the Public Counsel ("OPC") and the Company could not reach an agreement on. These issues are Raccoon Creek's net rate base; carrying costs for construction projects; corporate allocations; corporate payroll compensation and benefits; tax preparation fees and annual audit costs ("accounting costs") for Raccoon Creek and First Round Central States Water Resources, LLC ("First Round"); bad debt expense; and property taxes for the three Raccoon Creek Systems.

OVERVIEW OF THE DISPOSITION AGREEMENT

Q. Did Staff conduct a full investigation of Raccoon Creek in response to the Company's rate increase application?

A. Yes, as part of Staff's investigation, Staff met with the Company and OPC and provided both parties the results of its investigation. After negotiations, Staff and Raccoon Creek have reached a *Partial Disposition Agreement* regarding the resolution of certain elements of Raccoon Creek's sewer rate increase requests. The *Partial Disposition Agreement* is attached to this testimony as Schedule PRH-d2. OPC is not a signatory to the disposition agreement. Because there is no agreement at this time on overall revenue requirement and the other issues mentioned above, Staff has requested an evidentiary hearing on the unresolved issues. While there have been a significant number of issues resolved in this case, there are

Since the parties are still negotiating the settlement of these issues, some of them may be resolved prior to the evidentiary hearing.

several major issues that have not yet been resolved. I and other Staff witnesses will be

TEST YEAR AND UPDATE PERIOD

addressing these matters in our direct testimony filing.

- Q. What is the test year and update period for this case?
- A. Staff used a test year consisting of the nine months ending December 31, 2015, with an update period through March 31, 2016, to develop its revenue requirement recommendation in this case. Raccoon Creek received approval to acquire the three sewer systems (WPC, Village, and WSS) and was granted a Certificate of Convenience and Necessity (CCN) in Case No. SM-2015-0014 on April 6, 2015. Since Raccoon Creek has owned and operated these systems for less than a twelve month period, Staff annualized the available Raccoon Creek revenue and expense information based on the data for approximately nine months that was available through data requests. Additionally, since Staff developed its cost of service based on less than 12-months of data, Staff is recommending to

the Commission that either Staff perform a rate review 12-18 months after the effective date of rates in this matter or the Company file a rate case in the same time frame. This course of action is advisable because Staff did not have a full year of data to annualize and normalize revenues and expenses for Raccoon Creek as it generally would during a rate case.

REVENUE REQUIREMENT

- Q. What is Staff's proposed revenue requirement in this case?
- A. Based upon Staff's examination of Raccoon Creek's books and records and discussions with the Company's employees, Staff's recommended revenue requirement calculation for Raccoon Creek through March 31, 2016, using a return on equity (ROE) of 12.15%, is \$385,302 for the three Raccoon Creek sewer systems. This revenue requirement amount requires an increase in Raccoon Creek's current sewer rates of approximately 222%, 240% and 214% for WPC, Villages and WSS, respectively, for sewer service from their current rates. Since the Company and Staff could not reach an agreement on Raccoon Creek's revenue requirement, Staff's Accounting Schedules were not included in Raccoon Creek's Disposition Agreement. Concurrent with its direct testimony, Staff is filing Staff's Accounting Schedules for WPC, Village and WSS, and Raccoon Creek's Total Company Summary.
- Q. What caused the sewer service rates to increase so dramatically for these systems?
- A. Raccoon Creek closed on the purchase of the WPC, Villages and WSS sewer systems in April of 2015 and combined the companies under a single entity name, Raccoon Creek Utility Operating Company Inc. Raccoon Creek has invested approximately \$478,927, \$584,109 and \$438,663, respectively, for sewer improvements that needed to be upgraded for

these three systems to Department of Natural Resource (DNR) standards and to improve quality of service for the Raccoon Creek ratepayers. The Company's total investment in the improvements for the three sewer systems of Raccoon Creek is approximately \$1,501,699.

In addition to purchasing the three systems above, Raccoon Creek acquired the sewer infrastructure and land rights of Woodland Lake Estates ("Woodland") subdivision, which was an unregulated sewer system adjacent to WPC. Woodland became part of the Raccoon Creek utility property after the other three systems were acquired. While the purchase price for Woodland was minimal, Raccoon Creek incurred legal costs related to the transfer of titles and land easements necessary for this acquisition. To service the customers of Woodland, a gravity collection line was built to feed effluent from Woodland to WPC's collection infrastructure and treatment facility.

Furthermore, the last time these three systems received a rate increase from the Commission was in March 2013, April 1991 and April 2007, respectively, for WPC, Villages and WSS.

RACCOON CREEK'S NET RATE BASE

- **Q.** What is Staff's proposed level of net rate base in this case?
- A. Based on its analysis, Staff determined that the appropriate level of net rate base for this case is \$484,901, \$656,992 and \$482,125 for WPC, Villages and WSS sewer systems, respectively. Staff's total net rate base for Raccoon Creek is \$1,624,018. If further discussion in this proceeding is needed to Staff's net rate base calculations, Matthew Young of the Commission's Auditing Department and/or Keenan Patterson of the Commission's Engineering Analysis Unit will be addressing this issue in rebuttal testimony.

CARRYING COSTS FOR CONSTRUCTION PROJECTS (AFUDC RATE)

- Q. What is the Allowance for Funds Used during Construction (AFUDC)?
- A. AFUDC is an accounting practice whereby the financing costs associated with debt and equity funds used to finance plant construction are credited on the statement of income and charged to the Construction Work in Progress account on the balance sheet of a utility. AFUDC is a component cost of Property, Plant and Equipment as defined in the applicable regulatory system of accounts.
- Q. What is the AFUDC rate that Staff included in its cost of service for Raccoon Creek's construction projects?
- A. Staff included an AFUDC rate of 14% for Raccoon Creek's debt financed portion of the amount of plant under construction during each month of the construction projects.
 - Q. How was the AFUDC rate of 14% determined for this case?
- A. All of Raccoon Creek's construction projects were financed through debt; therefore, Staff made a policy decision to use the embedded cost of long term debt interest that the Commission recently concluded was the appropriate allowed debt rate to apply in Case No. WR-2016-0064, *In the Matter of the Water and Sewer Rate Request of Hillcrest Utility Operating Company, Inc.*, a case with similar financing and investment attributes as the current case.
- Q. Since the weighted cost of capital is one of the issues that is being scheduled for hearing in this case, if the Commission orders a different embedded cost of long term debt rate, will that affect the AFUDC rate for this case?

- A. Yes. If the Commission orders a different embedded long term debt rate for this case, then that same rate should be used as the AFUDC rate for this case.
- Q. What is the dollar amount of the carrying costs for the AFUDC funds that Staff has calculated and included in rate base for this case?
- A. Staff has included \$72,685 in rate base for the carrying costs of the Raccoon Creek construction projects.

FIRST ROUND ALLOCATIONS

- Q. Please provide a description of First Round's corporate structure.
- A. First Round's corporate structure consists of three regulated utility subsidiaries: Hillcrest Utility Operating Company, Inc. (Hillcrest), Raccoon Creek Utility Holding Company Inc. and Indian Hills Utility Operating Company, Inc. (Indian Hills). First Round, through an operating agreement with Central States Water Resources, Inc. (CSWR) provides management, accounting and administrative duties for Hillcrest, Raccoon Creek and Indian Hills. CSWR is an affiliate of First Round. Josiah Cox is the president of CSWR, Mr. Jack Chalfant is the chief financial officer and Ms. Brenda Eaves is the office manager. CSWR's Board of Directors consists of Mr. David Glarner, Mr. Robert Glarner and Mr. Cox. David Glarner and Robert Glarner have 87% of the membership units in First Round through GWSD, LLC (GWSD), which is owned through trusts in their names. The Glarners also own 49% of CSWR's stock through GWSD. Josiah Cox has 13% of the membership units in First Round and a 51% ownership in CSWR. The highly confidential investment structure for the First Round's investments in the utility systems is attached to this testimony as Highly Confidential Schedule PRH-d3.

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- A. First Round is an LLC which currently owns three regulated Missouri operating companies (Hillcrest, Raccoon Creek and Indian Hills) and is currently considering the acquisition of several other Missouri water and sewer utilities. Each operating system has specific costs that are directly assigned on its books and records (i.e.; contract operator, billing & collection, PSC Assessment, property taxes, etc.), and do not require allocation. However, other costs are incurred by the LLC (i.e.: payroll, payroll taxes, office supplies, outside services, property insurance, employee benefits, rent, etc.) that cannot be directly assigned to one company; therefore, these costs have been allocated between Hillcrest, Raccoon Creek, Indian Hills and other utilities that will potentially be acquired. For ratemaking purposes, First Round allocated approximately 14% of these overhead costs to Raccoon Creek, which is the same allocation factor that First Round used for Hillcrest Utilities in an earlier rate proceeding (Case No. WR-2016-0064). Staff developed an allocation factor based on a combination of each systems construction improvement costs and the number of customer served by each system. Staff calculated an allocation factor for Raccoon Creek of 17.01% and this factor was used to allocate overhead costs in Staff's workpapers and accounting schedules. Staff's allocation workpaper for CSWR is attached to this testimony as Highly Confidential Schedule PRH-d4.
- Q. Why is it reasonable for Staff to recommend and the Commission to adopt a 17.01% allocation factor of overhead costs in this case?
- A. The 17.01% is based on the major cost drivers in this case which are the construction improvement costs and the number of customers served by each system. The

1 construction improvement costs for this case alone represents approximately 56% of the total
2 Staff revenue requirement for Raccoon Creek.

FIRST ROUND PAYROLL COMPENSATION

- Q. Pease provide a brief discussion of First Round's payroll.
- A. Currently, First Round has three employees through its appointment of CSWR as the named Manager pursuant to the March 5, 2015 Amended and Restated Operating Agreement of First Round. The President and CEO is Mr. Josiah Cox; Mr. Jack Chalfant is the Chief Financial Officer (CFO); and Ms. Brenda Eaves is the office manager. First Round, through CSWR, provides the management, accounting and administration duties for Hillcrest, Raccoon Creek and another regulated affiliate, Indian Hills. These three systems were recently acquired indirectly by First Round and the Company has spent approximately 4.4 million dollars improving these systems and resolving DNR violations.
- Q. Please explain how the Staff developed the corporate payroll compensation for this case.
- A. Staff used the Missouri Economic Research and Information Center (MERIC) website (which provides occupational compensation study information) for the St. Louis region to relate comparable regional CEO, CFO and office manager base salaries to the base salary amounts sought in this case by Raccoon Creek for the three First Round employees.
 - O. What is MERIC?
- A. MERIC is the research division for the Missouri Department of Economic Development. It provides innovative analysis and assistance to policymakers and the public, including studies of the state's targeted industries and economic development initiative.

 Other MERIC research includes Economic Conditions Reports, Economic Impact

- Q. What are the levels of compensation recognized by the MERIC system?
- A. MERIC Occupational Employment and wage estimates develop three levels for each occupation. Those levels are "entry level", "mean level" and "experienced level".
 - Q. Please provide a description of each one of these levels.

- A. The entry level is the beginning level of each occupational study and is at the lowest end of the pay scale. The mean level is the mid-range of the pay scale and is an estimate of the hourly rate, which is calculated using the varying hourly rates of a group of workers in a specific occupation. Additionally, mean level of pay represents that an equal number of employees are receiving less than the mean level of pay and an equal level of employees are receiving more than the mean level of pay. And finally, the experienced level is at the top end of the scale, which is the highest paid employee in each occupation.
- Q. Which level of the MERIC occupational study did Staff use to determine the annual amount of payroll for the First Round employees?
- A. Staff used the mean level of the MERIC occupational study to annualize First Round's payroll.
- Q. Please explain why Staff selected the mean level of the MERIC occupational study to annualize First Round's payroll.
- A. Staff selected the mean level because, at the time we developed our cost of service for Raccoon Creek, all of the employees had approximately a year of service operating and running a regulated utility and the Company was just beginning to establish itself as a regulated utility. In addition, Raccoon Creek is a relatively small Company with

- Q. Which level of the MERIC occupational study did the Company use to determine the annual amount of pay for First Round employees?
- A. It is my understanding that the Company used the experienced level of the MERIC occupational study to annualize First Round's payroll.
- Q. Should all of First Round's corporate payroll compensation be considered for inclusion in Raccoon Creek's rates in this case?
- A. No. Staff only allocated 17.01% of the total corporate payroll compensation into Raccoon Creek's cost of service for this case because the employees of First Round do work for all of the utility subsidiaries. In addition, Staff made an adjustment to remove the capitalized portion of payroll from Raccoon Creek's annualized amount of payroll.
- Q. How was the capitalized adjustment amount for payroll determined for this case?
- A. To account for the amount of labor that is associated with construction activities and capitalized instead of expensed, Staff applied an estimated operation and maintenance expense ratio (O&M expense ratio) to the First Round employees' payroll expense. Staff requested data pertaining to the actual amount of time each employee spent on construction and operations related activity from the Company, but has not received this data from Raccoon Creek. Therefore, Staff developed an estimated O&M expense ratio of 85% expense for the President and a 92% O&M expense ratio for the CFO and Office Manager. These O&M ratios are comparable to other small utilities that Staff has audited and is a

- Q. Can't Staff calculate its own O&M expense ratio for Raccoon Creek?
- A. No. The President, CFO and office manager time sheets are not maintained in enough detail to be able to identify the hours that they are working by system nor by description or function. It is not always possible to determine the hours that each employee is working on each system and it is also difficult to identify the tasks that they are working on.

FIRST ROUND AND RACCOON CREEK'S ACCOUNTING COSTS

- Q. What amount of accounting costs has Staff included in Raccoon Creek's cost of service?
- A. Staff included the actual amount of accounting costs paid (i.e., the amount that was included in First Round & Raccoon Creek's general ledgers) by First Round and Raccoon Creek Sewer of \$57 as of March 31, 2016, the update period for this case.
- Q. Has Staff received updated information from the Company concerning the accounting costs for Raccoon Creek for this case?
- A. Yes. On September 15, 2016, Staff received four invoices from First Round. Two were related to the audit of the December 31, 2015 consolidated financial statements of Raccoon Creek and First Round in the amount of \$20,000 (\$10,000 for each entity). The other two invoices were for tax preparation fees for Raccoon Creek and First Round's 2015 tax returns in the amount of \$5,000 (\$2,500 for each entity).

- Q. Will Staff be updating its cost of service to include these accounting costs?
- A Staff has requested copies of the 2015 Audited Financial Statements, 2015 Tax Returns and bank statements showing actual payments for these services and will make a determination of the appropriate amounts to include in rates once we receive these documents from the Company.
- Q. Should all of First Round's accounting fees be assigned to Raccoon Creek in this case?
- A. No. If otherwise found to be reasonable and prudent, Staff will include 17.01% of the total corporate accounting costs in Raccoon Creek's cost of service in this case.

BAD DEBT EXPENSE

- Q. Please explain the adjustment that Staff made to Raccoon Creek's bad debt expense in this case.
- A. As of December 31, 2015, WPC, Villages and WSS has an accumulated total of \$3,172 (WPC \$381, Villages \$2,173 and WSS \$618) in bad debt expense on their books. This amount is 2.01 percent of Raccoon Creek's current annualized revenue level. This level of bad debt expense is extremely high as compared to other small water and sewer utilities within the state of Missouri. Most small water and sewer utilities' bad debt expense levels that I have been associated with are approximately 1 percent or less of their current annualized revenue. Therefore, Staff is making an adjustment to decrease Raccoon Creek's bad debt expense by 50% (\$1,586), to allow for a more reasonable level (approximately 1%) of this expense in this case.
- Q. Has Staff been able to determine why it believes that Raccoon Creek's bad debt expense levels are extremely high?

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PROPERTY TAXES

Q. How are property taxes assessed by the taxing authority and paid by the utility?

is in the process of contacting Whiteman AFB for assistance with this issue.

Yes. One contributing factor to the Company's current high level of bad debt

expense may be the fact that Raccoon Creek does not have authority in its tariffs to collect

customer deposits from higher risk customers and is not performing such deposit collections.

tariffs to include authority to collect customer deposits consistent with the provisions

permitted by 4 CSR 240 13-13.030 and evaluate the benefits of charging customers deposits

Village's sewer system customers. These customers are Air Force personnel that are assigned

to Whiteman Air Force Base (AFB) and frequently are transferred or moved from the area

without paying their outstanding sewer bills. Staff has had discussions with Mr. Cox

concerning contacting Whiteman AFB to request assistance in collecting the past overdue

customer sewer bills by these Air Force members and it is Staff's understanding that Mr. Cox

that meet the customer deposit criteria defined in Commission rules.

Therefore, Staff recommends that, on a going forward basis, Raccoon Creek change its

Additionally, a significant level of this bad debt expense is carried on the books for the

A. Property taxes are computed using the assessed property values. The taxing authority, either state or local, uses the utility plant balances assessed as of January 1 of each year. This date is critical because it forms the basis for the property tax bill, which is generally paid at the end of that same year, no later than December 31. Utilities are required to file with the taxing authorities a valuation of their utility property based on the January 1 assessment date the first of each year. Several months later, the taxing authorities will provide the utility with what they refer to as an "assessed value" for each category of property

owned. Much later in the year (typically in the fall) the utilities are given the property tax rate. Property tax bills are then issued to the utilities with "due dates" of December 31 for each year based on the property tax rates applied to assessed value. For example, a utility will pay property taxes on December 31, 2015, based upon an assessment made of its asset values as of January 1, 2015.

- Q. How did Staff determine the amount of property tax expense in this case?
- A. During its audit, Staff requested Raccoon Creek to provide its property tax receipts as of December 31, 2015. Staff received property tax receipts for all three of the Raccoon Creek properties as of December 31, 2015, and included those amounts in its cost of service.
 - Q. What is the amount of property taxes that Staff included in its cost of service?
- A. Staff included \$870 for the three sewer systems in the cost of service for property tax expense. This is based on the actual taxes paid as of December 31, 2015.
 - Q. Does this conclude your direct testimony?
- 15 A. Yes.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of a Rate Increase for Raccoon Creek Utility Operating)	Case No. SR-2016-0202
Company Inc.)	
AFFIDAVIT OF	PAUI	R. HARRISON

STATE OF MISSOURI) ss COUNTY OF COLE)

COMES NOW PAUL R. HARRISON and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Direct Testimony and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

PAUL R. HARRISON

JURAT

DIANNA L. VAUGHT
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: June 28, 2019
Commission Number: 15207377

Notary Public

Education, Background and Case Participation

Paul R. Harrison

I am a Utility Regulatory Auditor with the Missouri Public Service Commission (MoPSC or Commission). I have performed duties as a Utility Regulatory Auditor within the Auditing Department at the Commission since January 18, 2000. As a result of being assigned lead auditor in a significant number of rate cases, I have been responsible for the supervision of other Auditing Department employees in rate cases and other regulatory proceedings before the Commission.

I graduated from Park College, Kansas City, Missouri, where I earned Bachelor of Science degrees in both Accounting and Management with Magna Cum Laude honors in July 1995. I earned an Associate degree in Missile Technology from the Community College of the Air Force in June 1990. I attended and graduated with honors from; the Senior Non-Commission Officer (NCO) Academy, NCO Academy and Air Force Leadership School while on active duty in the USAF. I attended and received a certificate of completion of an H&R Block income tax training course in July 1996 and begin my own tax practice during that same year.

Prior to coming to work at the Commission, I was the manager for Tool Warehouse Inc. for four and one-half years. As the manager, I trained, supervised; and coordinated the daily activities of personnel assigned to the Tool Warehouse. I was responsible for the daily sales volume, performed break-even sales analysis and maintained corporate budgets. I created and; performed monthly inventory, generated inventory reports and, ordered all merchandise, (\$2.5 million), for the tool warehouse in accordance with Tool Warehouse policy and procedures.

Prior to being the manager of the Tool Warehouse Inc, I was in the United States Air Force (USAF) for twenty-three years. During my career in the USAF, I held many different

duty positions with various levels of responsibility. I retired from active duty as the Superintendent of the 321st Strategic Missile Wing Mechanical Flight. In that capacity, I supervised 95 missile maintenance technicians and managed assets valued in excess of \$50 million.

My duties at the Commission include performing audits of the books and records of regulated public utilities under the jurisdiction of the MoPSC, in conjunction with other Commission Staff (Staff) members. In this capacity, I am required to prepare testimony and serve as a Staff expert witness on rate cases concerning the ratemaking philosophy and methodology of issues that I am assigned. As a senior auditor and the lead auditor on a number of formal and informal cases, I have participated in the supervision and instruction of auditors within the Utility Services Department.

I acquired my knowledge of the ratemaking philosophy and methodology of these topics through hands on experience and through on-the-job training working prior rate cases before this Commission. I acquired general knowledge of these topics through review of Staff work papers from prior rate cases brought before this Commission, through review of prior Commission decisions and Company's testimony with regard to these areas. In addition, I have reviewed the Commission's Annual Reports and the Company's Security and Exchange Commission (SEC) Annual Reports, Tariffs, work papers and responses to Staff's data requests addressing these topics in this case.

I have participated in approximately thirty formal and thirty-five informal rate case proceedings before the Commission. I was assigned as lead auditor on over fifty percent of these cases.

Additionally, my college coursework included accounting and auditing classes. Since commencing employment with the Commission, I have attended various in house training seminars and National Association of Regulatory Utility Commission (NARUC) training conferences.

The Schedule below lists the formal and informal rate cases along with the issues that I filed testimony and participated in before the Commission.

CASE PROCEEDING/PARTICIPATION

PAUL R. HARRISON

COMPANY	CASE NO.	TESTIMONY/ISSUES
	SUMMARY OF	FORMAL CASES
The Empire District Electric Company	ER-2016-0023	August 2016 Surrebuttal Testimony-Pension & OPEBs; Riverton 12 Conversion / Construction Audit.
The Empire District Electric Company	ER-2016-0023	June 2016 Cost of Service Report-Pension & OPEBs; Riverton 12 Conversion / Construction Audit.
The Empire District Electric Company	ER-2014-0351	May 2015 Cost of Service Report-Pension & OPEBs; Jurisdictional Allocations; Fuel & Purchased Power; OFF-System Sales Revenue & Expense; Entergy Purchased Power Contract; Fly Ash Offset; Software Maintenance & CWC, Rate Base calculation of Fuel Coal, Fuel-Purchased Power; Fuel-Purchased Oil & Fuel-Purchased Gas. Lead Auditor
The Empire District Electric Company	ER-2012-0345	February 2013 Cost of Service Report-Pension & OPEBs; COR & State Flow-Through Income Taxes; Income Tax Current & Deferred Expense; ADIT; and Infrastructure & Tree Trimming Expense. Lead Auditor
Missouri American Water Company	WR-2011-0337 SR-2011-0338	February 2012 Surrebuttal Testimony-Unamortized Balance of the Security AAO; Roark Sewer Plant Operating Expenses and MAWC's Acquisitions.

COMPANY	CASE NO.	TESTIMONY/ISSUES
		Lead Auditor
Missouri American Water Company	WR-2011-0337 SR-2011-0338	January 2012 Rebuttal Testimony-Pension Tracker Mechanism and Acquisitions of Loma Linda, Aqua Missouri and Roark Water & Sewer. Lead Auditor
Missouri American Water Company	WR-2011-0337 SR-2011-0338	November 2011 Cost of Service Report- Pensions & OPEBS; Amortization of Regulatory Assets; Acquisitions; Plant in Service; Depreciation Reserve, Depreciation Expense, CIAC Amortization; Other Rate Base Items; Net Negative Salvage; Current & Deferred Income Taxes; ADIT; and Accounting Schedules. Lead Auditor
Missouri American Water Company	WR-2011-0336	August 2011 Memorandum Infrastructure System Replacement Surcharge (ISRS)-2011
The Empire District Electric Company	ER-2011-0004	February 2011 Surrebuttal Testimony-Infrastructure Remediation Costs; FAS 123 Accumulated Deferred Income Taxes
The Empire District Electric Company	ER-2011-0004	February 2011 Cost of Service Report-Current & Deferred Income Taxes; ADIT; and Infrastructure & Tree Trimming Expense
KCPL-GMO MPS & L&P Electric	ER-2010-0356	January 2011 Surrebuttal Testimony- Advanced Coal Credits ITC; KC Earnings Tax
		True-Up - Pensions & OPEBS; Current Income & Deferred Taxes Litigated- Advanced Coal Credit ITC
Kansas City Power & Light (KCPL)	ER-2010-0355	January 2011 Surrebuttal Testimony- Advanced Coal Credits ITC; KC Earnings
		True-Up - Pensions & OPEBS; Current Income & Deferred Taxes Litigated- Advanced Coal Credit ITC
Kansas City Power & Light (KCPL)	ER-2010-0355	December 2010 Rebuttal Testimony- Regulatory Plan Amortization Impact on Income Taxes

COMPANY	CASE NO.	TESTIMONY/ISSUES
KCPL-GMO MPS & L&P Electric	ER-2010-0356	November 2010 Cost of Service Report- Pensions & OPEBS; Current & Deferred Income Taxes; Advanced Coal Credits ITC; KC Earnings Tax and Regulatory Plan Amortization Impact on Income Taxes
Kansas City Power & Light (KCPL)	ER-2010-0355	November 2010 Cost of Service Report- Pensions & OPEBS; Current & Deferred Income Taxes; Advanced Coal Credits ITC; KC Earnings Tax and Regulatory Plan Amortization Impact on Income Taxes
The Empire District Electric Company	ER-2010-0130	April 2010 Surrebuttal Testimony – Bad Debt Expense; Infrastructure Rule Expense; State Income Tax Flow Through Prior to 1994 – Tax Timing Differences
		Lead Auditor
The Empire District Electric Company	ER-2010-0130	April 2010 Rebuttal Testimony – State Income Tax Flow-Through Prior to 1994 – Tax Timing Differences
		Lead Auditor
The Empire District Electric Company	ER-2010-0130	February 2010 Cost of Service Report- Allocations; Pensions & OPEBS; DSM Program; Amortization Rate Base & Expense; Revenues; Bad Debt; Banking Fees; Infrastructure & Tree Trimming Expense; Employee Benefits; Lease Expense; O&M Expenses New Plant; Carrying Cost New Plant; Current & Deferred Income Taxes.
		Lead Auditor
The Empire District Gas Company	GR-2009-0434	October 2009 Cost of Service Report- Allocations/Rents; Right-of-Way Clearing; AAO-MGP Costs; Franchise Fees; Reconciliation; Current & Deferred Income Taxes.
		Lead Auditor
W. C'. D. A.I.I.	TID 4000 0000	April 2009
Kansas City Power & Light (KCPL)	ER-2009-0089	Surrebuttal- Non-Talent Assessment Severance Costs True-Up - Pensions & OPEBS; Current & Deferred Income Taxes
KCPL-GMO MPS & L&P Electric	ER-2009-0090	April 2009 Surrebuttal-Cost of Removal-Income Taxes, Regulatory Asset Amortization.
		True-Up - Pensions & OPEBS; Income & Deferred

COMPANY	CASE NO.	TESTIMONY/ISSUES
		Taxes
		Lead Auditor
Kansas City Power & Light (KCPL)	ER-2009-0089	March 2009 Cost of Service Report- Pensions & OPEBS; Non-Talent Assessment Severance Costs; Officer Expenses; Meals & Entertainment Expense; Employee Relocation Expense; Lobbying Expense; Lease Expenses; Non-Operating Cost Adjustment; Current & Deferred Income Taxes
KCPL-GMO MPS & L&P Electric	ER-2009-0090	March 2009 Cost of Service Report- Pensions & OPEBS; Miscellaneous Adjustments; SJLP Merger Transition Costs; Employee Relocation Expense; Lease Expenses; Current & Deferred Income Taxes Lead Auditor
KCPL-GMO L&P Steam	HR-2009-0092	March 2009 Cost of Service Report- Pensions & OPEBS; Miscellaneous Adjustments; Current & Deferred Income Taxes Lead Auditor
Missouri American Water Company	WR-2008-0311	October 2008 Surrebuttal- Belleville Lab Allocations; Compensation for Services MAWC Provided to AWR Litigated- Corporate Allocations True-Up - Corporate Allocations; Income & Deferred Taxes Lead Auditor
Missouri American Water Company	WR-2008-0311	August 2008 Cost of Service Report- Case Reconciliation; Corporate Allocations & Expenses; Belleville Lab Allocations; Compensation for Services MAWC Provided to AWR; Current & Deferred Income Taxes Lead Auditor
Laclede Gas Company		Separate Docket Investigation of Affiliated Transactions, Corporate Allocations & Appropriate Time Charges Between Laclede's Regulated & Unregulated Subsidiaries

COMPANY	CASE NO.	TESTIMONY/ISSUES
Missouri Gas Utility	GR-2008-0060	February 2008 Cost of Service Report- Revenue Requirement Run (EMS) Merger & Acquisition Costs (Start-Up Costs); Corporate Allocations; Current & Deferred Income Taxes
		Lead Auditor
Missouri Gas Energy	GU-2007-0480	July 2008 Rebuttal- AAO Manufactured Gas Plant
		Litigated- Manufactured Gas Plant
		Lead Auditor
		September 2007 Memorandum – AAO Manufactured Gas Plant
Missouri Gas Energy	GU-2007-0480	Lead Auditor
Laclede Gas Company	GR-2007-0208	May 2007 Direct – Affiliated Operations; HVAC & Home Sale Inspection; Injuries & Damages; Insurance; 401 (k) Expenses; Pensions & OPEBS; Non-Qualified Pension Plan Expenses; Current & Deferred Income Taxes
		True-UP - Current & Deferred Income Taxes
		November 2006 Rebuttal- Environmental Response Fund, Manufactured Gas Plant
		Litigated- Manufactured Gas Plant
Missouri Gas Energy	GR-2006-0422	
Missouri Gas Energy	GR-2006-0422	October 2006 Direct— Revenues; Purchased Gas Adjustments; Bad Debt Expense; ECWR AAO Bad Debt: Rent; Pensions & OPEBS; Income Taxes; Franchise Taxes; Manufactured Gas Plant, and Case Reconciliation
		Litigated- Emergency Cold Weather Rule
		True-Up - Revenues; Bad Debt Expense; Pensions
		& OPEBS; Income Taxes
The Empire Electric Company	ER-2006-0315	July 2006

COMPANY	CASE NO.	TESTIMONY/ISSUES
		Rebuttal- Storm Damage Tracker
The Empire Electric Company	ER-2006-0315	June 2006 Direct- Tree Trimming Expense and Construction Over-Run Costs
Missouri Pipeline & Missouri Gas Company LLC	GC-2006-0378	November 2006 Memorandum Plant in Service, Depreciation Reserve, Depreciation Expense, Transactions & Acquisition Costs and Current & Deferred Income Taxes
New Florence Telephone	TC-2006-0184	October 2006 Memorandum Plant in Service; Depreciation Reserve; Depreciation Expense; Plant Overage; and Materials & Supplies
Cass County Telephone	TC-2005-0357	July 2006 Memorandum Plant in Service; Depreciation Reserve; Depreciation Expense; Plant Overage; Plant Held for Future Use and Missouri Universal Service Fund
Cass County Telephone & New Florence Telephone Fraud Investigation Case	TO-2005-0237	May 2006 Memorandum Fraud Investigation case involving Cass County Telephone and New Florence Telephone
Missouri Gas Energy	GR-2004-0209	June 2004 Surrebuttal - Revenues and Bad Debt Expense True-Up - Revenues; Bad Debt Expense; Current & Deferred Income Taxes
Missouri Gas Energy	GR-2004-0209	May 2004 Rebuttal - Revenues; Bad Debt Expense; and Manufactured Gas Plant Litigated- Manufactured Gas Plant
Missouri Gas Energy	GR-2004-0209	April 2004 Direct – Revenues; Purchased Gas Adjustments; Bad Debt Expense; Medical Expense; Rents; Incentive Compensation and Current & Deferred Income Taxes
Union Electric Company d/b/a AmerenUE (Gas)	GR-2003-0517	October 2003 Direct – Corporate Allocations; UEC Missouri Gas Allocations; CILCORP Allocations; Rent Expense; Maintenance of General Plant Expense; Lease Agreements; and Employee Relocation Expense

COMPANY	CASE NO.	TESTIMONY/ISSUES
Union Electric Company d/b/a AmerenUE (Electric)	EC-2002-1	June 2002 Surrebuttal - Coal Inventory; Venice Power Plant Fire; Tree Trimming Expense; and Automated Meter Reading Service
Laclede Gas Company	GR-2002-356	June 2002 Direct - Payroll; Payroll Taxes; 401k Pension Plan; Health Care Expenses; Pension Plan Trustee Fees; Incentive Compensation and Clearing Account: True- Up – Payroll; Payroll Taxes; and Clearing Accounts
Union Electric Company d/b/a AmerenUE (2 nd period, 3 rd EARP) (Electric)	EC-2002-1025	April 2002 Direct - Revenue Requirement Run; Plant in Service; Depreciation Reserve; Other Rate Base items; Venice Power Plant Fire expenditures; Tree Trimming Expense; and Coal Inventory
2 nd Complaint Case, Union Electric Company d/b/a AmerenUE (Electric) New Test Year ordered by The Commission.	EC-2002-1	March 2002 Direct - Materials and Supplies; Prepayments; Fuel Inventory; Customer Advances for Construction; Customer Deposits; Plant in Service; Depreciation Reserve; Venice Power Plant Fire Expenditures; Tree-Trimming Expense; Automated Meter Reading Expense; Customer Deposit Interest Expense; Year 2000 Computer Modification Expense; Regulatory Advisor's Consulting Fees; and Property Taxes
		Deposition – April 11, 2002
1 st Complaint Case, Union Electric Company d/b/a AmerenUE (Electric)	EC-2002-1	July 2001 Direct - Materials and Supplies; Prepayments; Fuel Inventory; Customer Advances for Construction; Customer Deposits; Plant in Service; Depreciation Reserve; Power Plant Maintenance Expense; Tree-Trimming Expense; Automated Meter Reading Expense; Customer Deposit Interest Expense; Year 2000 Computer Modification Expense; Computer Software Expense; Regulatory Advisor's Consulting Fees; Board of Directors Advisor's Fees and Property Taxes.
		Deposition – November 27 2001
Union Electric Company d/b/a AmerenUE (2 nd period, 2 nd EARP) (Electric)	EC-2001-431	February 2001 Coal Inventory
Union Electric Company d/b/a	GR-2000-512	August 2000 Direct - Cash Working Capital; Advertising Expense;

GOLFELING	GAGENO	TROUTH ANNUAGGY TO
COMPANY	CASE NO.	TESTIMONY/ISSUES
AmerenUE (Gas)		Missouri PSC Assessment; Dues and Donations; Automated Meter Reading Expenses; Computer System Software Expenses (CSS); Computer System Software Expenses (Y2K); Computer System Software Expenses (EMPRV); Generation Strategy Project Expenses; Regulatory Advisor's Consulting fees and Board of Directors Advisor's fees.
	SUMMARY OF I	NFORMAL CASES
Raccoon Creek Sewer	SR-2016-0202	In Progress Memorandum Cost of Service; Corporate Allocations; Corporate Payroll & Benefits; Outside Services; Revenues & Expenses; Net Rate Base; Rents; Current Income Taxes.
Rogue Creek Water & Sewer	WO-2016-0139	In Progress Investigatory Docket concerning the conduct of the court-appointed receiver for MPB & PCB Sewer
MPB & PCB Receiver Investigation	WO-2016-0139	In Progress Investigatory Docket concerning the conduct of the court-appointed receiver for MPB & PCB Sewer
Hillcrest Water & Sewer	WR-2016-0064 SR-2016-0065	May-2016 Rebuttal Testimony—Corporate Payroll & Benefits; Corporate Allocations; Audit Costs & Tax Preparation Fees
		Lead Auditor Litigated
Hillcrest Water & Sewer	WR-2016-0064 SR-2016-0065	April-2016 Direct Testimony— Corporate Payroll & Benefits; Corporate Allocations; Audit Costs & Tax Preparation Fees
		Lead Auditor Litigated
Hillcrest Water & Sewer	WR-2016-0064 SR-2016-0065	March-2016 Memorandum Cost of Service; Corporate Allocations; Corporate Payroll & Benefits; Outside Services; Revenues & Expenses; Net Rate Base; Rents; Current Income Taxes.
		Lead Auditor

COMPANY	CASE NO.	TESTIMONY/ISSUES
Missouri American Water Company Acquisition of Hickory Hills Water & Sewer	WA-2016-0019	November 2015 Memorandum - Hickory Hills Acquisition by MAWC, Development of Rate Base; Revenues & Expenses; Determination of Regulatory Asset in order for Receiver to recover Court Ordered Receiver Fees.
		Lead Auditor
Raytown Water Company	WR-2015-0246	November 2015 Memorandum Cost of Service; Incentive Compensation; Affiliated Transactions; Tank Painting & Maintenance; City Permit Fees; EIERA Insurance Costs; Outside Services; Transportation & Communication Expense; Board of Directors Fees; City ROW-City of Raytown Permit/Degradation Fees; CIAC; Meter Change-out Program; PSC Assessment-Rate Case Expense; Uniform Expense; Tower Tenant Revenues; Purchased Water; Rent; Current & Deferred Income Taxes.
		Lead Auditor
Ridge Creek Water Company	WA-2015-0182	October 2015 Memorandum – Certificate of Convenience & Necessarily Concerning review of Feasibility Study and Development of Rate Base; Expenses & Revenues Lead Auditor
Smithview/Kuhle H20 Water	WA-2015-0000	September 2015 Memorandum – Review of Financial Ability to operate the system and or sale of the Assets
Empire District Electric Company	EO-2015-0172	March 2015 Memorandum – Sale of 35-Miles of 161kV Transmission Line to Westar Energy Lead Auditor
Missouri American Water Company Acquisition of Anna Meadows	WA-2015-0019	January 2015 Memorandum - Anna Meadows Acquisition & Certificate of Convenience & Necessarily Concerning review of Feasibility Study and Development of Rate Base; Expenses & Revenues Lead Auditor

COMPANY	CASE NO.	TESTIMONY/ISSUES
Hickory Hills Water & Sewer Receivership Case	WR-2014-0167 SR-2014-0166	November 2014 Memorandum - Small Informal rate case – All Cost of Service items to include Rate Base; Revenues; Expenses; and Current & Deferred Taxes. Lead Auditor
Missouri American Water Company Acquisition of Benton County Sewer District No. 1	SA-2015-0065	April 2016 Memorandum – Benton County Acquisition & Certificate of Convenience & Necessarily Concerning review of Feasibility Study and Development of Rate Base; Expenses & Revenues. Lead Auditor
MPB & PBC Sewer Systems Receivership Case	SR-2014-0067 SR-2014-0068 SO-2014-0052	September 2014 Memorandum Small Informal rate case – All Cost of Service items to include Rate Base; Revenues; Expenses; and Current & Deferred Taxes September 2013 Memorandum Interim Rates – Special Surcharge; Cost of Service in order to determine if rates are sufficient to cover expenses or if this utility needs an emergency infusion of cash to provide safe and adequate service for the ratepayers.
		Lead Auditor
Roy-L Water & Sewer Utilities	WR-2013-0543 SR-2013-0544	June 2014 Small Informal rate case – All Cost of Service items to include Rate Base; Revenues; Expenses; and Current & Deferred Taxes. Lead Auditor
Rogue Creek Utilities, Inc. Receivership Case	WR-2013-0436 SR-2013-0435	February 2014 Memorandum - Small Informal rate case – All Cost of Service items to include Rate Base; Revenues; Expenses; and Current & Deferred Taxes. May 2013 Memorandum Interim Rates – Special Surcharge; Cost of Service in order to determine if rates are sufficient to cover expenses or if this utility needs an emergency infusion of cash to provide safe and adequate service for the ratepayers. Lead Auditor

COMPANY	CASE NO.	TESTIMONY/ISSUES
Missouri American Water Company & Tri-State Water Acquisition Case	WO-2013-0517	September 2013 Memorandum – Determination of net rate base to include Plant in Service; Depreciation Reserve; Other Rate Base Items including CIAC and Revenues & Expenses
		Lead Auditor
Summit Natural Gas of Missouri, Inc.	GA-2013-0404	April 2013 Memorandum Summit Natural Gas of Missouri, Inc. Certificate of Convenience & Necessarily Concerning review of Feasibility Study and Development of Revenues; Expenses & Revenues.
		Lead Auditor
Raytown Water Company	WR-2012-0405	July 2012 Memorandum Cost of Service; Payroll & Benefits; Incentive Compensation; Plant-In-Service, Depreciation Reserve & Other Rate Base Items: Affiliated Transactions; Tank Painting; City Permit Fees; EIERA Insurance Costs; PSC Assessment & Rate Case Expense; Outside Services; Transportation & Communication Expense; Dues & Donations, Lobbying Expense; Advertising Expense; Board of Directors Fees; DNR Fees; Education Expense; Software & IT Expenses; Office Expense & Lease Equipment; Franchise Taxes; Current & Deferred Income Taxes . Lead Auditor
Summit Natural Gas of Missouri, Inc.	GA-2010-0012	June 2012 Memorandum Summit Natural Gas of Missouri, Inc. Certificate of Convenience & Necessarily Concerning review of Feasibility Study and Development of Rate Base; Expenses & Revenues. Lead Auditor
Rogue Creek Water & Sewer	WR-2012-0000 SR-2012-0000	April 2012 Earnings Investigation - To Determine if the Utility was Earning Sufficient Revenues to Recover its Cost of Providing Service To Ratepayers.

COMPANY	CASE NO.	TESTIMONY/ISSUES
Missouri American Water Company & Saddlebrooke Acquistion	WA-2012-0066	April 2012 Memorandum Saddlebrooke Acquisition & Certificate of Convenience & Necessarily Concerning review of Feasibility Study and Development of Rate Base; Expenses & Revenues.
		Lead Auditor
Missouri American Water Company & Roark Water Acquisition Case	WO-2011-0213 SO-2011-0214	March 2011 Memorandum Determination of net rate base to include Plant in Service; Depreciation Reserve; Other Rate Base Items including CIAC and Revenues & Expenses
		Lead Auditor
Tri-State Water Company	WR-2011-0037	March 2011 Memorandum Cost of Service; Rate Case Expense; Medical; Insurance; Communications Expense; Transportation Expense; Office Expense: Miscellaneous maintenance expenses; Rate Base and Current & Deferred Income Taxes
		Lead Auditor
Raytown Water Company	WR-2010-0304	February 2011 Memorandum Cost of Service; Affiliated Transactions; Tank Painting; Hydrant Maintenance; City Permit Fees; EIERA Insurance Costs; I&D & Workers Comp; CIAC; Board of Directors Fees; DNR Fees; Education Expense; Software & IT Expenses; Office Expense & Lease Equipment; Franchise Taxes; Current & Deferred Income Taxes.
		Lead Auditor
Noel Water Company	WR-2009-0395	August 2009 Memorandum Cost of Service; All Revenues & Expenses related to Noel Water Company; Plant in Service; Depreciation Reserve & other Rate Base Items. Lead Auditor
Tri-State Water Company	WR-2009-0058	May 2008 Memorandum Cost of Service; Payroll; rent expense; miscellaneous maintenance expenses; Rate Base and Current & Deferred Income Taxes. Lead Auditor

COMPANY	CASE NO.	TESTIMONY/ISSUES
Big Island Water & Sewer	WA-2006-0480 SA-2006-0482	January 2007 Direct - Certificate of Necessitate Application Case: Cost of Service; All Revenues & Expenses related to Big Island Water & Sewer; Plant in Service; Depreciation Reserve & other Rate Base Items. Lead Auditor
Aqua Missouri Water and Sewer	QS-2005-0008 QW-2005-009 QS-2005-0010 QW-2005-0011	October 2006 Memorandum Cost of Service - All Revenues & Expenses related to Aqua MO Water & Sewer; Plant in Service; Depreciation Reserve & other Rate Base Items. Lead Auditor
Lake Region Water and Sewer Certificate Case	WA-2005-0463	October 2006 Memorandum Certificate of Necessitate Application Case Lead Auditor
Tri-State Utility Inc.	WA-2006-0241	May 2006 Memorandum Certificate of Necessitate Application Case Lead Auditor
Osage Water Company Environmental Utilities Missouri American Water	WO-2005-0086	February 2005 Memorandum Rate Base; Cost of Service; Income Statement Items; Pre-Post Sale of OWC, Sale of EU Assets to MAWC
North Suburban Water & Sewer	WF-2005-0164	December 2004 Memorandum Sale of All Stocks of Lake Region Water & Sewer to North Suburban Water & Sewer, Value of Rate Base Assets, Acquisition Premium Lead Auditor
Mill Creek Sewer	SR-2005-0116	December 2004 Memorandum Cost of Service; All Revenues & Expenses related to Mill Creek Sewer; Plant in Service; Depreciation Reserve & other Rate Base Items. Lead Auditor

COMPANY	CASE NO.	TESTIMONY/ISSUES
		September 2004
		Memorandum Cost of Service; All Revenues &
	WR-2005-0153	Expenses related to Roark Water & Sewer; Plant in
Roark Water and Sewer		Service; Depreciation Reserve & other Rate Base Items.
	SR-2005-0154	
		Lead Auditor
		December 2003
	WT-2003-0583	Memorandum Cost of Service; All Revenues &
Osage Water Company		Expenses related to Osage Water; Plant in Service;
	SR-2003-0584	Depreciation Reserve & other Rate Base Items

SUMMARY OF NON-CASE RELATED AUDITS

March 2013 – Hickory Hills Water and Sewer's investigation concerning value of assets and cost of service in order to determine the possibility of annexing this small utility with the city of California Missouri.

March 2012 – Assisted and trained several small utility companies (RDE Utilities, Rogue Creek Utilities and Smithview H2O Water) in the appropriate manner in which the Commission's Annual Report should be completed and filed.

January 2006 – Environmental Utilities and Osage Water Company Audit concerning provision of service to Eagle Woods Subdivision and disconnect notice

November 2004 - Internal Audit of Public Service Commission (PSC) Fixed Assets, physical inventory control process and location of assets

OF THE STATE OF MISSOURI

Case No. SR-2016-0202

PARTIAL DISPOSITION AGREEMENT

COMES NOW the Staff of the Missouri Public Service Commission (Staff) and Raccoon Creek Utility Operating Company, Inc. (Raccoon Creek or Company), by and through counsel, and for their *Non-Unanimous Partial Disposition Agreement* in this matter hereby state:

1. On February 2, 2016, Raccoon Creek filed a letter with the Missouri Public Service Commission (Commission) requesting that the Commission approve increases in its annual sewer operating revenue, which resulted in the Commission opening Case No. SR-2016-0202. Raccoon Creek and Staff filed a joint *Motion for Extension* to extend the requirement to provide parties with Staff's preliminary report under Commission Rule 4 CSR 240-3.050(9), by 10 days. The Commission granted that extension, which also set a new filing date for the 4 CSR 240-3.050(11) requirement to file an executed disposition agreement of August 15, 2016. On the August 15, 2016, due date, Staff and Raccoon Creek requested an additional extension of the disposition agreement filing date to accommodate further settlement discussions. The Commission approved extension of the filing date and ordered the parties to file a disposition agreement no later than August 30, 2016.

- 2. In accordance with Raccoon Creek's request for a rate increase, Staff conducted a full investigation, met with the company and the Office of the Public Counsel (OPC) and provided both parties the results of its investigation. Staff and the Company have each provided the parties with proposed settlements of this matter. After negotiations, Staff and Raccoon Creek have reached a partial agreement or disposition (Disposition) on Raccoon Creek's request, a copy of which is attached hereto as Appendix A. Staff has also attached the memorandums reflecting the results of its investigation as Attachments A through E.
- 3. Staff and Raccoon Creek are still negotiating the settlement of additional issues in this matter; therefore, Staff has not filed its workpapers and positions with this disposition as it has in similar matters before this Commission.
- 4. The issues left unresolved between Staff and Raccoon Creek include: cost of capital, rate of return, finder's fees, net rate base, capital structure, revenue requirement and the resulting tariff sewer rates.
- 5. Staff intends to file a request for an evidentiary hearing to present to the Commission the outstanding issues in this matter.
- 6. OPC has been party to settlement discussions in this matter, but has not yet provided its position on the issues to Staff and the Company.
- 7. Raccoon Creek is current on its annual report filings and has no other actions pending before the Commission at this time.

WHEREFORE, Staff prays that the Commission will approve this *Partial Disposition*; and grant such other and further relief as the Commission considers just in the circumstances.

Respectfully Submitted,

/s/ Whitney Payne

Whitney Payne
Legal Counsel
Missouri Bar No. 64078
Attorney for the Staff of the
Missouri Public Service Commission
P. O. Box 360
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(573) 751-8706 (Telephone)
(573) 751-9285 (Fax)
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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served by electronic mail, or First Class United States Postal Mail, postage prepaid, on this 30th day of August, 2016, to all counsel of record.

/s/ Whitney Payne

COMPANY/STAFF PARTIAL AGREEMENT REGARDING DISPOSITION OF SMALL SEWER COMPANY REVENUE INCREASE REQUEST

RACCOON CREEK UITLITY OPERATING COMPANY, INC.

MO PSC FILE NO. SR-2016-0202

BACKGROUND

Raccoon Creek Utility Operating Company, Inc. ("Company") initiated a small company revenue increase request ("Request") for 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 4 CSR 240-3.050, Small Utility Rate Case Procedure ("Small Company Procedure"). In its request letter, received by the Commission on February 2, 2016, the Company set forth its request for an increase of \$529,557 in its total annual sewer service operating revenues. The Company also acknowledged that the design of its customer rates, service charges, customer service practices, general business practices and general tariff provisions would be reviewed during the Commission Staff's ("Staff") review of the revenue increase request, and could thus be the subject of Staff's recommendations. In the acquisition case the Company purchased three small utilities (West 16th, WPC, and the Villages) located in close proximity and combined them into one company. Since the acquisition significant upgrades have been made to all three wastewater treatment systems. The Company provides service to approximately 500 residential customers, and as part of the Request the Company proposed one rate and tariff for all customers.

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

Upon completion of Staff's investigation of the Company's Request, Staff provided the Company and the Office of the Public Counsel ("Public Counsel") with information regarding Staff's investigation and the results of its investigation, including Staff's initial recommendations for the resolution of the Company's Request. Because there is no agreement at this time on an overall revenue requirement, Staff is not presenting workpapers that support the derivation of the

Small Company Revenue Increase Disposition Agreement MO PSC File No. SR-2016-0202 Raccoon Creek Utility Operating Company, Inc. – Page 2 of 5

revenue requirement at this time. Staff and the Company will continue negotiations in pursuit of reaching a settlement of the remaining issues.

RESOLUTION OF THE COMPANY'S RATE INCREASE 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 the Company's Request, Staff and the Company hereby state the following agreements:

- (1) The Auditing Unit conducted a full and complete audit of the Company's books and records using the 9-month period ended December 31, 2015, updated to March 31, 2016, as the basis for the revenue requirement determined above. The audit findings can be found in Attachment A, incorporated by reference herein:
- (2) The schedule of depreciation rates in Attachment B, incorporated by reference herein, includes the depreciation rates used by Staff in its revenue requirement analysis and shall be the prescribed schedule of sewer plant depreciation rates for the Company;
- (3) The Company shall implement the following recommendation contained in the CMAU Report attached hereto as Attachment C and incorporated by reference herein, and provide proof of implementation to the Manager of the Commission's CMAU:
 - (a) Within ninety (90) days of the effective date of an order approving this Company/Staff Disposition Agreement, the Company will evaluate the benefits of charging and refunding customer deposits consistent with Commission Rule 4 CSR 240-13.030 and the Company's tariffs, particularly in the Villages Water and Sewer Company Inc. service territory.
- (4) Within ninety (90) days of the effective date of an order approving this Company/Staff Disposition Agreement, the Company shall utilize timesheets for all employees to record work assignments and the time associated with each work assignment, function, and for each system. Time records assist in tracking the amount of time employees spend working on each sewer system, and aids in the development of corporate allocations. Timesheet information should be maintained in sufficient detail to capture the amount of time each employee spends on each system and each regulated utility operation/maintenance activities, as opposed to construction activities. Timesheets should also be used to track time by employee on non-regulated, merger and acquisition related activities. The Company shall provide proof of implementing this requirement to the Manager of the Commission's Auditing Department.

- (5) Within ninety (90) days of the effective date of an order approving this Company/Staff Disposition Agreement, the Company shall implement the following recommendation contained in the CMAU Report attached hereto as Attachment C and incorporated by reference herein, and provide proof of implementation to the Manager of the Commission's CMAU:
 - (a) The Company will develop and utilize time sheets for all employees to record the time associated with Company work activity.
- (6) Within one hundred and eighty (180) days of the effective date of an order approving this Company/Staff Disposition Agreement, the Company shall:
 - (a) update its books and records to conform to the National Association Regulatory Utility Commission (NARUC) Uniform System of Accounts (USOA) for Class A and B Sewer Utilities;
 - (b) develop Continuing Property Records (CPR) for all assets for its sewer systems.
 - (c) The Company shall provide proof of implementing these requirements to the Manager of the Commission's Auditing Department.
- (7) The Company shall mail its customers a final written notice of the rates and charges included in its proposed tariff revisions prior to or in conjunction with its next billing cycle. This shall be completed after issuance of the Commission report and order approving the rates following the evidentiary hearing. The notice shall include a summary of the impact of the proposed rates on an average residential customer's bill. When the Company mails the notice to its customers, it shall also send a copy to Staff's Case Coordinator who will file a copy in this case;
- (8) Staff or Public Counsel may conduct follow-up reviews of the Company's operations to ensure that the Company has complied with the provisions of this Company/Staff Disposition Agreement;
- (9) Staff or Public Counsel may file a formal complaint against the Company, if the Company does not comply with the provisions of this Company/Staff Disposition Agreement;
- (10) The Company, Staff and Public Counsel agree that they have read the foregoing Company/Staff 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 Company and Staff; and that the Company freely and voluntarily enters into this Disposition Agreement; and
- (11) The above agreements satisfactorily resolve all issues identified by Staff, Public Counsel and the Company regarding the Company's Request, except as otherwise specifically stated herein.

ISSUES FOR EVIDENTIARY HEARING

Staff and the Company could not find a resolution for the following issues: cost of capital; rate of

return; finder's fees; net rate base; capital structure; revenue requirement; and the resulting tariff

sewer rates. Staff intends to file a request to present these issues at an evidentiary hearing for

the Commission's determination, unless a further settlement is reached.

ADDITIONAL MATTERS

Other than the specific conditions agreed upon and expressly set out herein, the terms of

this Company/Staff Disposition Agreement reflect compromises between Staff and the

Company.

Staff of the Water and Sewer Department conducted an inspection of the facilities at the

three utilities and completed a report, which is included as Attachment D. Staff has completed a

Summary of Case Events and has included that summary as Attachment E, to this

Company/Staff Disposition Agreement.

The Company acknowledges that Staff will be filing this Company/Staff Disposition

Agreement and the attachments hereto. The Company also acknowledges that Staff may make

other filings in this case.

Additionally, the Company agrees that subject to the rules governing practice before the

Commission, Staff shall have the right to provide whatever oral explanation the Commission

may request regarding this Company/Staff Disposition Agreement at any agenda meeting at

which this case is scheduled to be considered by the Commission. Subject to the rules governing

practice before the Commission, Staff will be available to answer Commission questions

regarding this Company/Staff Disposition Agreement. To the extent reasonably practicable,

Staff shall provide the Company with advance notice of any such agenda meeting so that it may

have the opportunity to be present and/or represented at the meeting.

Small Company Revenue Increase Disposition Agreement MO PSC File No. SR-2016-0202 Raccoon Creek Utility Operating Company, Inc. – Page 5 of 5

SIGNATURES

Agreement Signed and Dated:

~	~			
Josiah	Cox			
JOSIGII	$-\infty$			

President

Raccoon Creek Utility Operating Company, Inc.

By:

Dean L. Cooper - #36592

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ATTORNEY-FOR RACCOON CREEK UTILITY OPERATING COMPANY, INC.

30 August 2016 Date

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Missouri Public Service Commission Staff

List of Attachments

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Auditing Department Recommendation Memorandum

AUDITING DEPARTMENT RECOMMENDATION MEMORANDUM

TO: Curtis Gateley, Water and Sewer Department, Case Coordinator

Whitney Payne, Legal Counsel

Kevin Thompson, Chief Staff Counsel

FROM: Paul R. Harrison, Utility Regulatory Auditor

Matthew Young, Utility Regulatory Auditor Jermaine Green, Utility Regulatory Auditor

Auditing Department Staff

SUBJECT: Auditing Department's Findings and Recommended Cost of Service

Raccoon Creek Utility Operating Company, Inc.

Case No. SR-2016-0202

DATE: August 23, 2016

Raccoon Creek Utility Operating Company, Inc. ("Raccoon Creek" or "Company") filed a rate increase request with the Missouri Public Service Commission ("Commission") on February 2, 2016. The proposed increase is in the amount of \$529,557 for these three sewer systems and, if approved, would result in an increase over current revenues of approximately 334%, 334%, and 334% for the West Sixteenth Street (WSS), Villages and WPC sewer systems, respectively. Raccoon Creek currently serves approximately 500 sewer customers in and around Knob Noster and Sedalia, Missouri. After Raccoon Creek's filing, the Commission's Staff ("Staff") performed an audit of Raccoon Creek sewer operations to determine whether a rate increase was appropriate, and if so, the amount thereof that was reasonable.

Based upon Staff's examination of Raccoon Creek's books and records, along with discussions with the Company's employees, Staff's recommended revenue requirement calculation for Raccoon Creek, using a return on equity (ROE) of 12.5%, is \$316,534 for the three sewer systems. This revenue requirement amount requires an increase in Raccoon Creek's current sewer rates of approximately 158%, 210% and 176% for WPC, Villages and WSS respectively. Attached to this Memorandum are Staff's Accounting Schedules and relevant workpapers related to its review and audit of Raccoon Creek's financial operations.

Test Year and Update Period

Staff used a test period in this case consisting of the nine months ending December 31, 2015, with an update period through March 31, 2016, in order to develop its revenue requirement recommendation in this case. Staff annualized revenues and

¹ Staff normally uses a "test year" (twelve months of actual financial data) as a starting point of its analysis of a utility's request to increase its customer rates. However, twelve months of accurate financial data for the Raccoon Creek operations was not available to the Staff for this audit. Instead, Staff relied upon financial information put together by Central States Water Resources after its

expenses based on the nine months of data available from Central States Water Resources (CSWR), the parent company that acquired the Raccoon Creek assets in March of 2015, during the course of its audit and updated this data through March 31, 2016.

Corporate Allocation

CSWR is a corporation which currently has three regulated Missouri operating companies (Raccoon Creek, Hillcrest Utilities and Indian Hills), but is currently considering acquiring several other Missouri water and sewer utilities. Each operating system has specific costs that are directly assigned on its books and records, therefore requiring no allocation. However, other costs are incurred by the corporation (i.e.: payroll, payroll taxes, office supplies, outside services, property insurance, employee benefits, rent, etc.) that are allocated to Hillcrest, Raccoon Creek, Indian Hills and three other utilities that will potentially be acquired. CSWR allocated approximately 14% of these corporate costs to Raccoon Creek on this basis, which is the same allocation factor that CSWR used for Hillcrest Utilities. Staff developed an allocation factor based on a combination of each systems construction improvement costs and the number of customer served by CSWR for the same six systems, three of which are CSWR's current operating companies and three of which may be acquired in the future. Staff's allocation factor for Raccoon Creek was calculated as 17.01% and this factor was used to allocate corporate costs in Staff's workpapers and accounting schedules. In addition, after corporate costs are allocated to Raccoon Creek, they must be allocated between the three stand-a-alone systems, WPC, Villages and WSS. Staff allocated the Raccoon Creek's corporate costs between these three systems by using Staff's annualized customer numbers for each of these three systems. As a result, Staff's allocation factor for these three systems are; WPC 13%, Villages 52.40%, and WSS 34.60%.

Rate Base

CSWR closed on purchase of the WPC, Villages and WSS sewer systems in March of 2015 and combined the companies under a single entity name, Raccoon Creek Utility Operating Company Inc. Since acquiring the Company, CSWR has invested approximately \$474,712, \$519,872 and \$435,204, respectively, for sewer improvements required to upgrade the three systems to Department of Natural Resource standards and to improve quality of service for the Raccoon Creek ratepayers. In addition to purchasing the three systems above, CSWR acquired the sewer infrastructure and land rights of Woodland Lake Estates ("Woodland") subdivision, which was an unregulated sewer system adjacent to WPC. Woodland is also part of the Raccoon Creek utility. While the purchase price for Woodland was minimal, CSWR incurred legal costs related to the transfer of titles and land easements necessary for this acquisition. To service the customers of Woodland, a gravity collection line was built to feed effluent from Woodland to WPC's collection infrastructure and treatment facility.

acquisition of the Raccoon Creek properties, which does not reflect data prior to March 31, 2015, as a starting point for its audit analysis of Raccoon Creek.

To update WPC's and WSS's rate base, Staff began with the plant and depreciation reserve balances identified in Case No. SM-2015-0014, Raccoon Creek's acquisition case and updated these amount through March 31, 2016. For The Villages, the Stipulation and Agreement from the acquisition case contained the following paragraph regarding the value of rate base:

For Village, Raccoon Creek will use the account balances shown in Attachment C to the Staff Memorandum as further adjusted by such additional contributions in aid of construction (CIAC) as is necessary to establish a rate base of \$60,000, as of closing. Further, in Raccoon Creek's first rate case, the rate base associated with the Village system as of closing for ratemaking purposes will be the lesser of: (1) \$60,000; or, (2) the rate base as of closing determined in that rate case...²

To honor the Stipulation and Agreement from the acquisition case, Staff increased the balance of Villages' CIAC in order to reconcile Raccoon Creek's net rate base level to the agreed level of \$60,000.

Staff has included the cost of CSWR's plant improvements in Raccoon Creek's current cost of service. In order to ensure accuracy of the Company's plant in service and accumulated depreciation reserve, Staff examined plant levels, additions and retirements using the general ledger from April 1, 2015 to March 31, 2016, for CSWR and Raccoon Creek. Staff reviewed all invoices relating to the additions of plant in service for the sewer improvements. As a result of review of the invoices and general ledger related to capital expenditures, the following adjustments were proposed:

- Staff made adjustments to the test period books to equal invoiced amounts.
- Staff made adjustments to reduce the booked amount for some legal services which were not related to Raccoon Creek.
- Staff did not include costs that were unsupported by the Company. These costs are identified in Staff Data Request Nos. 11 and 14.
- Staff included in capital costs an allowance for funds used during construction (AFUDC). AFUDC was calculated by applying the cost of long-term debt to monthly capital expenditures.
- In the Raccoon Creek cost of service, Staff included a 10 year amortization of organizational costs that is booked to USOA Account 301. Staff recommends

² Reference beginning on Page 4 of Stipulation and Agreement Case No. SM-2015-0014

that future amounts collected in rates above and beyond the original costs that were booked to Account 301 be used to offset any future cost of service.

- Staff included a 20 year amortization of the cost of sludge removal for the Villages that is booked to USOA Account 303. Staff recommends that future amounts collected in rates above and beyond the original costs that were booked to Account 303 be used to offset any future cost of service.
- Staff retired various amounts from the treatment and disposal equipment from plant in service and booked Contributions in Aid of Construction (CIAC).

Plant in Service, Depreciation Reserve, CIAC, CIAC Amortization and Prepayments were updated through March 31, 2016. For Prepayments, Staff allocated a 17.01% average of the CSWR balances for the most current six month period ending March 31, 2016.

Staff's ending balance of net rate base as of March 31, 2016 for WPC is \$459,593, for Villages is \$711,999 and for WSS is \$485,716, for a total net rate base for Raccoon Creek of \$1,657,308

Depreciation Rates

The depreciation rates used in this case were provided by Mr. Keenan Patterson of the Staff's Engineering Analysis Unit.

Revenues

For purposes of annualizing sewer revenues for these three systems, Staff used the average number of customers for the 12-months ending March 31, 2016 that were receiving service for WPC, Villages and WSS to determine customer growth. These customer numbers were multiplied by the current monthly tariff rate, and then multiplied by twelve to derive the annualized customer charge for revenues. Staff's analysis of revenues for the Company produced an annualized level of \$39,340, \$73,821 and \$54,848 for WPC, Villages and WSS sewer customers, respectively. Staff's adjusted level of sewer revenues for Raccoon Creek reflects the amount that should have been billed to customers, not the amount actually billed by Nitro Services, LLC, the vendor providing billing services to Raccoon Creek. In addition, Staff calculated an annualized amount of late fees for WPC and WSS. The annualized late fees for these two systems as of March 31, 2016 were \$577.50 for WPC and \$1,155 for WSS.

Account 904 - Bad Debt Expense or Uncollectable Account

As of December 31, 2015, WPC, Villages and WSS has an accumulated total of \$3,172 (WPC \$381, Villages \$2,173 and WSS \$618) in bad debt on their books. This amount is 2.01% of Raccoon Creek's current annualized revenue level. One contributing

factor to the Company's current high level of bad debt expense may be the fact that Raccoon Creek does not have authority in its tariffs to collect customer deposits from higher risk customers and is not performing such deposit collections. Audit Staff is making an adjustment to decrease bad debt expense for Raccoon Creek by \$1,586 to allow for a more reasonable level of this expense in this case. Audit Staff also recommends that, on a going forward basis, CSWR change its Tariffs to include authority to collect customer deposits consistent with the provisions permitted by 4 CSR 240 13-13.030 and evaluate the benefits of charging customers deposits that meet the customer deposit criteria defined in Commission rules.

Weighted Cost of Capital

The rate of return and capital structure used to develop Staff's recommended revenue requirement in this case were provided by Ms. Shana Griffin of the Staff's Financial Analysis Unit. Staff's recommended capital structure, equity, and interest rate for Raccoon Creek is 75% long term debt and 25% common equity, equity is 12.15% and interest is 8.15%. Staff's overall rate of return for Raccoon Creek is 9.15%.

Payroll, Payroll Tax, and 401(K)

Currently, CSWR has three employees. The President is Mr. Josiah Cox, along with a Chief Financial Officer (CFO), Mr. Jack Chalfont and an office manager, Ms. Brenda Eaves.

Staff compared each employee's base salary against the annual wage for similar occupations listed on the Missouri Economic Research and Information Center (MERIC) website to determine if CSWR employee's pay scale was comparable to salaries paid within the St. Louis Region. Staff's analysis determined that the base salary for each employee was not comparable to the annual wage for a mean (average) individual in the same occupation according to the MERIC database. Therefore, Staff made adjustments to CSWR's payroll to align each individual's salary with the average MERIC levels.

The President completes a timesheet allocating his hours between different operating companies and functions, but the office manager and CFO did not keep track of their hours using timesheets until November of 2015. The President, CFO and Office Manager needs to develop better timesheets to identify the hours that they are working by system and by description. It is not always possible to determine the hours that each employee is working on each system and sometimes it is difficult to identify the tasks that they are working. Therefore to account for payroll, Staff calculated the employee salaries by using Staff developed corporate allocation factor (mentioned above) of 17.01% and multiplying that number by the MERIC "mean" or "average" hourly wage to annualize payroll for Raccoon Creek.

To account for the amount of labor that is associated with construction activities, Staff applied an estimated Operation and Maintenance expense ratio (O&M expense ratio) to the CSWR employee's payroll expense. Staff has requested any available data pertaining to the actual amount of time each employee spends on construction and operations related activity, respectively, from the Company, but has not received adequate information from Raccoon Creek on this matter. Therefore, Staff estimated an 85% O&M expense ratio for the President and a 92% O&M expense ratio for the Office Manager and CFO. These O&M ratios are comparable to other small utilities that Staff has audited and is a conservative number when considering all of the plant improvements that have occurred at Raccoon Creek over the past several months. If the Company provides Staff with a more accurate analysis of the amount of labor that should be capitalized for Raccoon Creek at a later date, Staff will update the O&M ratio at that time.

Staff calculated payroll taxes based on Staff's annualized base salary and the current tax rates. In addition, CSWR has a 401K plan for its employees. CSWR is matching up to 3% of each employee's pay for the Company 401k plan. Therefore, Staff has included the Company's match (3%) into its cost of service for Raccoon Creek.

Staff applied the 17.01% corporate allocation factor for payroll taxes and 401K for all CSWR employees.

Employee Benefits

CSWR provides medical, dental, vision, and life insurance for their employees. Staff reviewed all of the invoices for the benefits in the test period in order to determine the level of insurance that should be included in the cost of service.

CSWR is paying 99% of the premium for health, dental and vision insurance, with 1% to be paid by the employee. All Missouri utilities of which Staff is aware require their employees to assume a greater percentage of responsibility for health benefits. After reviewing the practices of other water and sewer companies, Staff determined 90% was a more reasonable level for CSWR employees to pay. Therefore, Staff annualized the health, dental, and vision insurance by multiplying the monthly premium (90%) in effect as of March 2016 by 12 months to arrive at an annual amount. Staff then allocated the corporate level of medical, dental and vision insurance premiums by 17.01% for Raccoon Creek.

CSWR provides its CFO and office manager positions life insurance based on two years of their salary. Staff reviewed other utilities' level of life insurance and determined a two year salary basis was reasonable. However, Mr. Cox is provided a \$2.5 million insurance policy with the premiums being paid by CSWR. Staff believes that this amount of coverage is excessive, so Staff made an adjustment to remove the premiums for the \$2.5 million policy for Mr. Cox and instead included life insurance valued at two years of

Staff's annualized salary level for Mr. Cox in the Cost of Service. Staff annualized Accidental Death & Dismemberment, Long Term Disability, and Short Term Disability premium rates as of March 31, 2016, and allocated 17.01% of the amount of these premiums to Raccoon Creek.

Workman's Compensation Insurance

Workers' compensation insurance was adjusted by taking the amount of the premiums for the applicable period and adjusting the test year to match the amount of the premiums. Staff applied the corporate allocation of 17.01% for this expense to Raccoon Creek.

Maintenance Expense

Staff reviewed all invoices related to repairs and maintenance expense booked to Accounts 732 and 752 for sewer operations through March 31, 2016. Staff annualized the test year maintenance expense for these accounts as of March 31, 2016.

Operations Expense

1. Purchased Power

Staff has reviewed the electric bills from KCPL-Greater Missouri Operations to determine the annualized amount of electricity expense to include for Raccoon Creek in the rates for sewer operations. Staff annualized this expense by averaging the monthly amount over nine months and then multiplying that average by twelve months.

2. Chemicals

Staff reviewed the invoices regarding chemical expense for Account 741(sewer) for Raccoon Creek from the beginning of April 2015 through March 31, 2016. Based on this analysis, Staff annualized the level of this expense over a twelve month period and included that amount in Staff's cost of service.

3. Testing Expense

Staff reviewed all invoices within the test year related to sewer testing. Staff annualized the level of this expense over a twelve month period and included that amount in Staff's cost of service.

Travel Expenses

Staff reviewed all documents pertaining to travel expenses for CSWR during the test year. In addition, Staff reviewed mileage claimed by Mr. Cox and included only the

mileage expenses directly charged to Raccoon Creek. Staff also reviewed meal receipts and only allowed meal amounts that were related to Raccoon Creek. Mr. Cox and Mr. Chalfant received a flat monthly fee of \$900 for use of their personal vehicles. Mr. Cox also charged mileage for the use of his personal vehicle. Staff removed all expenses relating to the monthly rate for vehicles.

Communication Expense

Staff examined the amounts of AT&T Wireless payments and Spectrum payments made by CSWR during the test year. Since Mrs. Eaves, the office manager, uses her work cell phone for personal communication, Staff disallowed half of the expense. Staff annualized communication expense by developing a monthly level using the data that was available in the general ledger and Company invoices. Staff then applied the corporate allocation factor of 17.01% to CSWR's communication expense.

Property Insurance

CSWR has Property, Environmental, and Excess Liability over General Liability Insurance in place for Hillcrest and Raccoon Creek.

Property Insurance includes insurance for building, personal property and business income with extra expenses including "rental value" for five systems (two Hillcrest properties and three Raccoon Utility properties). After reviewing the policy and talking with the Company, Staff determined that the insurance for business income with extra expense including "rental value" is an inappropriate cost for Raccoon Creek customers to pay. Staff removed the percentage that was allocated to the business income premium from Raccoon Creek. Staff only included property insurance premiums for the three Raccoon Creek properties. Staff adjusted the environmental and excess liability for environmental insurance to match the amount of the insurance premiums for the three Raccoon Creek systems.

Certified Operator

Raccoon Creek has a contract with O&M Enterprises Inc. (O&M) regarding operation of the three wastewater treatment facilities. The contract start date is March 2015 and is effective for a 10 year period. Raccoon Creek pays O&M an operator fee for basic service annualized at \$59,160 (\$4,930 a month). These fees would be allocated between the WPC (13.00%), Villages (52.40%) and WSS (34.60%) cost of service. Staff included an annualized level of twelve months of this expense in Raccoon Creek's cost of service.

Billing and Collection

Raccoon Creek also has a contract with Nitro Services, LLC regarding billing, payment collection, customer service, and coordination services as of April of 2015.

Nitro monthly fee is \$2.00 per customer per month for customers up to 5,000 customers. This fee includes postage and materials for billing each customer. These fees are directly assigned to Raccoon Creek water and sewer.

Rate Case Expense / Regulatory Commission Expense (PSC and DNR)

Staff included the actual costs incurred by Raccoon Creek for rate case expense as of March 31, 2016, directly relating to this case (Case No. SR-2016-0202). Staff's rate case expense adjustment is based upon all costs associated with filing and bringing this case before the Commission, such as outside consulting fees and employee travel expenditures. The ultimate amount of rate case expense incurred by the Company in this proceeding will be directly associated with the length of the case up through the settlement conference and hearing process, if applicable. Staff will continue to update these costs throughout the course of the case. Staff is proposing to normalize this cost over a three-year (3-year) period.

In addition to rate case expense, Staff has included an annualized amount for the Company's PSC assessment expense that was issued for fiscal year 2016. Staff also included an annualized amount for DNR fees.

Property Tax

Property taxes are those taxes assessed by state and local county taxing authorities on a utility's "real property" as of January 1st of each year. On the first of each year, utilities are required to file with the taxing authorities a valuation of their utility property owned as of the January 1 assessment date. Property tax bills are issued to the utilities with "due dates" of December 31 of the same year.

Since CSWR has not owned Raccoon Creek for a full year and has made improvements that have not been assessed on taxes, the taxes for this case are based on the minimum assessed value of plant in place prior to CSWR's acquisition.

Additional Adjustments

Staff has reflected additional adjustments in its cost of service to annualize amounts related to: 1) Customer Account Expense; 2) Outside Services Employed; 3) Rents; and 4) Amortization of a portion of prior Contributions in Aid of Construction (CIAC).

Staff also excluded from the cost of service amounts relating to: 1) invoices that did not match the General Ledger; 2) non-reoccurring expenses; and 3) an adjustment for CIAC offset for depreciation expense.

Audit Staff Recommendations for Raccoon Creek Company:

- 1) The Acquisition case for Raccoon Creek was completed in March 2015 and the former WPC, Villages and WPC tariff rate was adopted by Raccoon Creek in April 2015. Therefore, Staff generally had to rely on less than twelve months of actual revenue and expense information to determine the cost of service for Raccoon Creek sewer operations in the current case. Normally, Staff would be able to review a full twelve months of financial data for purposes of developing a cost of service for a utility. Therefore, Staff recommends the Commission approve as part of the disposition agreement with the Company in this case for it to file another rate case or Staff shall initiate a rate review in 12-18 months in order to develop a more normal cost of service based on additional actual revenue and expense information beyond what was available in this proceeding. At that point in time, the Company will be operating under ownership of CSWR for approximately one and half to two years and Staff will be able to identify any variances between a cost of service based on a full test year and the one developed in this case. This recommendation should be completed within 12 to 18 months of any Commission order issued in this Case, No. SR-2016-0202.
- 2) Timesheets must be utilized for all employees to record work assignments and the time associated with each work assignment, function, and for each system. Time records assist in tracking the amount of time employees spend working on each water and sewer system, and aids in the development of corporate allocations. Timesheet information should be maintained in sufficient detail to capture the amount of time each employee spends on each system and each regulated utility operation/maintenance activities, as opposed to construction activities. Timesheets should also be used to track time by employee on non-regulated, merger and acquisition related activities. This recommendation should be completed within ninety (90) days of any Commission order issued in this Case, No. SR-2016-0202.
- 3) CSWR needs to develop a better employee timesheet for hours spent working on each system. This timesheet should provide a description of the job performed; number of hours spent and breakout the hours by system. This recommendation should be completed within ninety (90) days of any Commission order issued in this Case, No. SR-2016-0202.
- 4) CSWR needs to continue to update its books and records to conform to the National Association Regulatory Utility Commission (NARUC) Uniform System of Accounts (USOA) for Class A and B Sewer Utilities. This recommendation should be completed within one hundred and eighty (180) days of any Commission order issued in this Case. No. SR-2016-0202.
- 5) CSWR needs to develop Continuing Property Records (CPR) for all assets for its water and sewer systems. This recommendation should be completed within one hundred and eighty (180) days of any Commission order issued in this Case, No. SR-2016-0202.

Disposition Agreement Attachment B

Schedule of Depreciation Rates

RACCOON CREEK UTILITY OPERATING COMPANY, INC.

SCHEDULE OF DEPRECIATION RATES (SEWER)

SR-2016-0202

ACCOUNT		DEPRECIATION	AVERAGE SERVICE	NET
NUMBER	ACCOUNT DESCRIPTION	RATE	LIFE (YEARS)	SALVAGE
	COLLECTION PLANT			
352.1	Collection Sewers (Force)	2.0%	50	0%
352.2	Collection Sewers (Gravity)	2.0%	50	0%
353	Services (A & B)	2.0%	50	0%
	PUMPING PLANT			
362	Receiving Wells	4.0%	26	-5%
363	Electric Pumping Equipment	10.0%	10	0%
	TREATMENT & DISPOSAL PLANT			
371	Structures & Improvements	3.7%	30	-10%
372	Treatment & Disposal Facilities	5.0%	22	-10%
372.1	Oxidation Lagoons	4.6%	* 22	-60%
373	Plant Sewers	2.5%	40	0%
374	Outfall Sewer Lines	2.0%	50	0%
	GENERAL PLANT			
391	Office Furniture & Equipment	5.0%	20	0%
391.1	Office Electronic & Computer Equip.	14.3%	7	0%
393	Stores Equipment	4.0%	25	0%
394	Tools, Shop, and Garage Equipment	5.0%	18	10%
397	Communication Equipment	6.7%	15	0%

^{*} The depreciation rate for Account Number 372.1 is a remaining life rate based on a 22-year remaining life.

Disposition Agreement Attachment C

Consumer and Management Analysis Unit Report

REPORT OF CUSTOMER SERVICE AND BUSINESS OPERATIONS REVIEW

Consumer and Management Analysis Unit Small Company Rate Increase Request Case No. SR-2016-0202

Raccoon Creek Utility Operating Company, Inc. Brooke Richter and Lisa Kremer

The Consumer and Management Analysis Unit (CMAU) staff of the Missouri Public Service Commission ("Commission") initiated an informal review in March 2016 of the customer service and business processes, procedures, and practices of Raccoon Creek Utility Operating Company, Inc. ("Company"). The review was performed in response to the Company's request for a rate increase in Case No. SR-2016-0202, which was filed on February 2, 2016. The Company's request is for an increase of \$529,557 in its annual sewer system operating revenues.

The CMAU staff examined the Company's tariffs, annual reports, Commission complaint and inquiry records, and other documentation related to the Company's customer service and business operations. In preparation of this report, the CMAU staff submitted data requests to the Company, performed an on-site interview with three company employees and conducted a conference call with Company personnel. The CMAU staff's review of the Company resulted in the following recommendation:

THE CMAU STAFF RECOMMENDS THAT COMPANY MANAGEMENT:

1. Evaluate the benefits of charging and refunding customer deposits consistent with Commission Rule 4 CSR 240-13.030 and the Company's tariffs, particularly in the Villages Water and Sewer Company Inc. service territory. This recommendation should be completed within ninety (90) days of the effective date of any Commission order issued in Case No. SR-2016-0202.

The purpose of the CMAU is to promote and encourage efficient and effective utility management. These objectives contribute to the Commission's overall mission to ensure that customers receive safe and adequate service at reasonable rates while providing utilities the opportunity to earn a fair return on their investment.

The objectives of this review are to document and analyze the management control processes, procedures, and practices used by the Company 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

This report contains the results of the CMAU staff's review.

History

Raccoon Creek Utility Operating Company serves three separate sewer systems located in Knob Noster and Sedalia, Missouri. Each system has distinct tariff provisions. The Commission order issued in Case No. SM-2015-0014, which became effective on December 24, 2014, granted Raccoon Creek a certificate of convenience and necessity and authorized Raccoon Creek to acquire the assets of Village Water and Sewer Company (Village), West 16th Street Sewer Company (WSS) and W.P.C. Sewer Company (WPC).

The Village Water and Sewer Company, Inc. was first authorized by the Commission in 1989 to provide sewer service in an area commonly known as the Villages of Whiteman in Knob Noster, Missouri. The West 16th Street Sewer Co. was purchased and first authorized by the Commission in 1988 to provide sewer service in the Hunter's Ridge residential development in Sedalia, Mo. The W.P.C. Sewer Company was first certificated by the Commission to provide sewer service in Missouri in 1989 in South Walnut Hills, a residential development in Sedalia, Mo. The Company provides sewer service to a total of approximately 500 customers in all three systems. There has been considerable change in the number of customers over the past year, however, limited growth is anticipated. Customer service and business office operation reviews have not been conducted by the CMAU staff since Raccoon Creek was granted its Certificate in March 15, 2015. Prior to the acquisition by Raccoon Creek Utility Operation Company, CMAU

staff previously performed a customer service review of W.P.C. Sewer Company in 2013 in Case No. SR-2013-0053, and a review of West 16th Street Sewer Company in 2008 in Case No. SR-2008-0389. There has been no previous customer service review of The Villages Water and Sewer Company.

Overview

Josiah Cox is the owner/president of Central States Water Resources (CSWR). CSWR is a private regulated water utility company that provides water & wastewater management facilities for underserved communities. Raccoon Creek Utility Operating Company, Inc. is a subsidiary of CSWR. An office manager performs all business office operations and the Company contracts with O&M Enterprises, Inc. to perform all outside operations and maintenance. Outside operations activities include emergency service calls, manhole repair and maintenance, service and utility construction inspections, sewer main flushing, lagoon repair and maintenance, chemical application to lagoon cells, and fence repair and upkeep. Company personnel represent that time associated with Company work activity is tracked for all employees on QuickBooks software and the CMAU staff has reviewed these timesheets.

The Company's business office is located at 500 Northwest Plaza Drive, Suite 500, St. Ann, Missouri 63074 and hours of operation are 7:00 a.m. to 4:00 p.m. Monday thru Friday. The Company has a contract with Nitor Billing to provide 24/7 customer support for any billing questions. Business office operations of CSWR include maintaining customer account records, responding to customer complaints and inquiries, answering the phone, opening the mail, and processing payments for contracting services. The president also responds to emergency customer calls.

Customer Billing

Raccoon Creek Utility Operating Company contracts with Nitor Billing to generate and mail all customer bills. Company personnel indicate that the monthly bills are mailed on or about the 4th of each month, with customer bills due 21 days from the date the bills are mailed. Raccoon Creek Utility Operating Company uses QuickBooks software to maintain customer records. Office personnel assert that customer account data is backed up to a cloud database whenever account modifications are made.

Payment Remittance

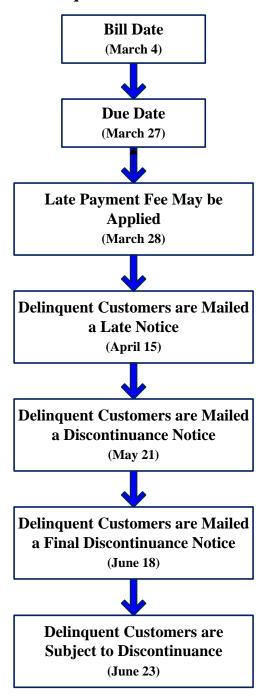
Customer payment options include check, debit card, credit card, or E-check. Customers incur no fees for use of any of the payment options. Nitor Billing processes all payment remittance. Most payments are received in the mail or online through Nitor's web-based software, Munibilling. Company personnel assert that bill payments are processed, recorded, and deposited on the day they are received.

Credit and Collections

Customers requesting sewer service are currently required to complete an application. They must complete an application online on the Company's website. A security deposit is not required as a condition for providing service. Company personnel indicate that returned checks have not been a problem. The Company has received and processed only one returned check since it was certified in March 2015. The Village's current tariff does not have a provision for a returned check fee. However, WSS and W.P.C.'s current tariff has a \$25 returned check fee provision. The Company is currently not charging a returned check fee on any of the three sewer systems.

The Company has an established procedure for handling delinquent accounts. The following illustration shows the actions that are taken on delinquent accounts:

Delinquent Account Actions



As shown in the illustration for bills with a bill date of March 4th, Company personnel indicate that customers with unpaid accounts may be assessed a late payment fee of the balance due on the 27th of the month. The Company has informed CMAU staff that they started applying late fees in December 2015. Late fee provisions are addressed in each Company tariff. A late notice is mailed by the middle of the month following a delinquent bill, a discontinuance

notice is mailed after the middle of the following month, and a final notice is mailed about the middle of the next following month, about four days before the service is subject to discontinuance (June 23rd in the illustration).

Raccoon Creek Utility Operating Company personnel indicated that as the Company was working to get all of its customers current on their bills, they started sending disconnect notices in November 2015. As a result of sending these notices, three customers have been disconnected since November 2015. The Company's tariff includes a provision for a reconnect fee for any nonpaying customer that would have service discontinued. The WSS sewer system reconnect fee is \$150 and the fee for the Villages and W.P.C sewer systems varies based on the cost of reconnection. Currently the Company is only charging a \$50.00 reconnect fee for a nonpaying customer at any of the three sewer systems that would have service discontinued. The Company does not use a collection agency to pursue the collection of amounts owed to Raccoon Creek Utility Operating Company. Thirty-eight uncollectible sewer accounts, with a total of \$3,303.60, have been written-off since Raccoon Creek acquired the three systems in March 2015. Thirty-three of these thirty-eight uncollectible accounts are from the Villages sewer system. The Company has communicated with the CMAU staff that most of these customers are from Whiteman Air Force Base.

Complaints and Inquiries

Customers with questions or concerns may call the telephone number appearing on their bill, which is the Nitor billing answering service. This number is a 24/7 toll-free telephone number that is auto-transferred to O&M's emergency number if it is a maintenance emergency. If it is a billing question or concern, the call will be answered by the Nitor billing answering service. Nitor billing answering service keeps a log of all calls that the Raccoon Creek Office Manager can view at any time. If it is a general Company question or complaint, then Nitor billing answering service will transfer the call to Raccoon Creek's Office Manager. Company personnel indicate that customer contacts are recorded on the Customer Complaint Log that includes the date, customer name, phone number, address, and reason for the contact. A review of the Commission's complaint/inquiry records since the Company was certified in March 2015 shows there have been three complaints.

Customer Communication

The Company has an informational brochure which contains information required by Commission Rule 4 CSR 240-13.040. The Company is currently sending the brochure to all new customers. Current customers will soon be able to find the brochure available to view online on the Company's website at http://www.centralstateswaterresources.com. Some information is also conveyed through a newsletter when there are expected major water disruptions that take place.

Findings, Conclusions, and Recommendations

The following discussion presents a summary of the findings, conclusions, and recommendations pertaining to the Company's customer service operations. Recommendations resulting from rule or tariff violations are specifically noted and associated with a 90-day implementation requirement. The information presented in this section focuses on the following issue that requires Company management's attention:

• Customer Deposits

Customer Deposits

Delinquent account write-offs in the Villages sewer system totaled 33 customer accounts with a dollar value of \$2,181.88 in 2015 and were significantly higher in this service territory than the remaining two systems. While there is no current provision for customer deposits in any of the three Raccoon Company tariffs', such provisions are proposed by the Commission Staff in the Company's present rate case. CMAU staff recommends that the Company evaluate collecting customer deposits consistent with Commission Rule 4 CSR 240-13.030, particularly from the Villages sewer system, as this may mitigate the amount of bad-debt write-offs which are ultimately included in rates paid by the balance of the Company's rate payers.

THE CMAU STAFF RECOMMENDS THAT COMPANY MANAGEMENT:

Evaluate the benefits of charging and refunding customer deposits consistent with Commission Rule 4 CSR 240-13.030 and the Company's tariffs, particularly in the Villages Water and Sewer Company Inc. service territory. This recommendation should be completed within ninety (90) days of the effective date of any Commission order issued in Case No. SR-2016-0202.

Implementation Review

The CMAU staff will conduct a review of the Company's progress regarding the implementation of the one recommendation made in this report.

Disposition Agreement Attachment D

Water and Sewer Department Report

REPORT OF WATER AND SEWER UNIT FIELD OPERATIONS AND TARIFF REVIEW

Raccoon Creek Utility Operating Company, Inc. Case No. SR-2016-0202 Jon Dallas / David Spratt / Curt Gateley

Background

Raccoon Creek Utility Operating Company, Inc. (Company) received its certificate of convenience and necessity from the Missouri Public Service Commission (Commission) November 24, 2014 in case number SM-2015-0014. This Company was formed by purchasing Village Water and Sewer Company, Inc. (near Whiteman Air Force Base in Knob Noster in Johnson County); W.P.C. Sewer Company; and West 16th Street Sewer Company, Inc. (in Sedalia in Pettis County). These three systems collectively provide service to approximately 500 sewer customers. The Commission's Water and Sewer Staff (Staff) performed an inspection on the sewer systems. Staff's findings and recommendations for the Company are listed below.

The Villages at Whiteman

Treatment Facility

The sewer system at the Villages near Whiteman Air Force Base in Knob Noster in Johnson County is a three-cell lagoon. The Missouri Department of Natural (DNR) issued a notice of violation (NOV) in September of 2012 for a variety of issues which required the lagoon to be upgraded. The Company has addressed the following issues included in the NOV:

- 10 CSR 20-8.180 (4) (C) 3 Failed to furnish at least two operational blowers which provide adequate/uniform mixing.
- Sections 644.051.1(3) and 644.076.1, RSMo, and 10 CSR 6.010 (8) (A) 4 Failed to operate and maintain facilities (remove sludge, reseed disturbed areas, maintain equipment) to comply with the Missouri Clean Water Law and Special Conditions #6, Water Quality Standards, of MSOP MO-0109142.
- Sections 644.051.1 (1) and 644.076.1, RSMo, 10 CSR 20-7.015(8), and 10 CSR 20-7.031(3) Caused pollution of a tributary to Long Branch Creek, waters of the state, by reducing the dissolved oxygen below levels that can support aquatic life.
- Sections 644.051.1 (2) and 644.076.1, RSMo, 10 CSR 20-7.031 (3) Discharged water contaminants into waters of the state, which reduced the quality of such waters below the Water Quality Drinking Standards established by the Missouri Clean Water Commission by making the downstream portion of the tributary to Long Branch Creek uninhabitable to aquatic life and preventing full maintenance of beneficial uses.
- 10 CSR 8.020(11) (C) 7 Failed to protect the outfall sewer from structural instability, stoppage, and the effects of floodwater, ice, and other hazards (the outfall pipe was partially buried).

After acquisition, the Company installed a moving bed biofilm reactor (MBBR) between the second and third cells of the lagoon for the treatment and removal of nutrients like ammonia and nitrogen that could not be removed by the lagoon treatment process. A lift station was also installed to pump the

partially treated effluent from the second cell to the MBBR. After the waste water is treated in the MBBR it flows into the third cell of the lagoon to receive additional biological treatment. The effluent is chlorinated and dechlorinated before it is discharged into the receiving stream. The Company is keeping the three-cell lagoon in place to allow for primary treatment of waste water and overflow storage in the event of a large storm or power outage.

At the time of the inspection, the sludge was being pumped out of the lagoon to lower the level of the lagoon's cells to allow for more detention time and better treatment of the waste water.

The treatment facility is fenced for security. At the time of Staff's inspection some new sections of fence were being replaced that had been damaged by storms

Collection System

The collection system is composed of PVC pipe of varying sizes. The homes to the North and to the West of the lagoon are at a higher elevation than the treatment plant so all sewage flows through the collecting sewer to the treatment plant by gravity. The homes on the South side are at a lower elevation than the treatment plant. Each of these homes has customer owned septic tanks and effluent pumps. The customer's service sewer is connected to a pressure sewer system and the effluent is pumped uphill to the treatment plant. (Spratt/Dallas)

Hunter's Ridge

Treatment Facility

The Company has replaced the old extended aeration waste water treatment plant with a new one near the location of the old plant in the Hunter's Ridge service area, formerly owned by West 16th Street Sewer Company, Inc.

As part of its inspection Staff sent data requests (DRs) to the Company requesting copies of the engineering report and feasibility studies to see what alternatives the Company and engineering firm considered prior to installing the new plant to determine if there were other more cost effective methods for treatment or to update the existing facility to perform satisfactorily. Staff did not receive engineering studies or cost analysis studies from the Company but did receive a letter from the engineering firm, 21 Design Group, explaining why it believed that a prudent decision had been made in replacing the facilities. The letter states: "[T]he wastewater facility was exhibiting multiple signs of failure and had currently surpassed its useful life." Issues cited were the need for flow equalization due to large amounts of inflow and infiltration (I & I), poor condition of the steel frame of the structure, age and poor condition of piping and mechanical blowers due to poor maintenance, current design was not properly configured for nutrient removal, lack of sludge holding, and safety concerns. [C]onsideration was given to repairing the facility, but due to structural failures precluding adding new equipment, the history of floating due to hydrostatic pressure which could not be anchored due to structural failure risk or internal weighting which would reduce required tankage contact surface area for watse water treatment, the need for a new plant configuration to meet MDNR nutrient removal criteria, the need for flow equalization tank to accommodate the high flows experienced during rain event SSO's, and the need for aerated sludge storage refurbishment was determined to be unfeasible. Therefore, and in order to avoid the costs of phasing of the existing facility, the most cost effective route was to construct a new facility and utilize the old treatment plant for flow equalization and sludge holding."

Page 33 of 47

Schedule PRH-d2

The Company states in its construction permit submitted to DNR that the new plant was installed "to replace aging infrastructure" and to "allow the facility to meet ammonia effluent limits." The Company further states "[W]ith the construction of the new extended aeration plant, better control and operation of the aeration zone is expected." The new plant has been placed at a higher elevation than the former plant to reduce the likelihood of being inundated by the receiving stream during flood conditions. This placement above the water table will also prevent the treatment plant from "floating", being hydrostatically lifted by pressure from ground water, out of the ground as the old plant had done.

The shell of the former plant has been retained as a flow equalization basin. The bottom has been filled with gravel and capped with concrete, leaving a basin with a concrete floor and metal sides. The flow equalization basin is intended as overflow storage due to reported inflow and infiltration (I&I) problems with the system prior to acquisition or in the event of a large storm or power outage. The Company states in its construction permit that "[F]low equalization will assist the plant to maintain a better effluent and also allow less clarification to meet the proposed limits" for ammonia and E. coli. Because of the room for storage, this system will not require a backup electric source.

Collection System

The Company's sewer collection system consists of mostly eight-inch gravity sewer. There is a lift station at the end of a cul-de-sac which pumps waste water a short distance through a pressure collecting sewer until it reaches the treatment plant. At the time of Staff's visit, the lift station lock had been cut by a service person and had not been replaced. The Company told Staff that a new lock would be installed on the lift station.

The Company has smoke tested the collecting sewers looking for water infiltration points in the collection system, and has reportedly made a significant number of repairs, but still has a large amount of I&I entering the treatment plant. Excessive 'clean' stormwater entering the system reduces plant capacity, can interfere with proper treatment, and in extreme cases can wash sludge from the treatment plant into the receiving stream.

(Spratt/Dallas)

South Walnut Hills

Treatment Facility

The Company has installed a new extended aeration waste water treatment plant near the location of the old plant in the South Walnut Hills service area, formerly owned by W.P.C. Sewer Company. The new plant has been placed next to the former plant and the fencing around the facility has been replaced.

Staff sent data requests (DRs) to the Company requesting the engineering report and feasibility studies to see what alternatives the Company and engineering firm considered prior to installing the new plant to determine if there were other more cost effective methods for treatment or updating the existing facility to perform satisfactorily.

In a report from 21 Design Group Engineering and Surveying, "[T]he wastewater facility was exhibiting multiple signs of failure and had currently surpassed its useful life." Issues cited were the

need for flow equalization due to large amounts of inflow and infiltration (I & I), poor condition of the steel frame of the structure, age and poor condition of piping and mechanical blowers due to poor maintenance, current design was not properly configured for nutrient removal, lack of sludge holding, and safety concerns. [C]onsideration was given to repairing the facility, but due to structural failures precluding adding new equipment, the history of floating due to hydrostatic pressure which could not be anchored due to structural failure risk or internal weighting which would reduce required tankage contact surface area for waste water treatment, the need for a new plant configuration to meet MDNR nutrient removal criteria, the need for flow equalization tank to accommodate the high flows experienced during rain event SSO's, and the need for aerated sludge storage refurbishment was determined to be unfeasible. Therefore, and in order to avoid the costs of phasing of the existing facility, the most cost effective route was to construct a new facility and utilize the old treatment plant for flow equalization and sludge holding."

The Company states in its construction permit submitted to DNR that "construction of the new treatment plant is to meet final ammonia limits. With the construction of the new extended aeration plant, better control and operation of the aeration zone is expected."

The shell of the former plant has been kept in place to be used as flow equalization as well as overflow storage due to reported I&I problems prior to acquisition or in the event of a large storm or power outage. The Company states in its construction permit that "[F]low equalization will assist the plant to maintain a better effluent and also allow less clarification to meet the proposed limits" for ammonia and E. coli. Because of the amount of storage, this system will not require a backup electric source.

Collection System

The Company's sewer collection system consists of mostly eight-inch gravity sewer. A separate sewer system that was owned by a small home owner's association that was inside of the Company's certificated area has been acquired by the Company and connected to its South Walnut Hills sewer system. These 30 customers were connected due to the association's previous sewer treatment facility, a recirculating sand filter, being in dire need of maintenance and not being equipped to meet future effluent limits. Therefore the old sand filter was removed from service after the new connection was made. A short extension of the pressure collecting sewer was installed to connect to the existing system for South Walnut Hills. In the area where the 30 customers were added, each home has its own grinder pump and the effluent is sent through a pressure collecting sewer.

The Company has smoke tested the collecting sewer looking for infiltration points for storm water and has reportedly made a number of repairs but still has a significant amount of I&I entering the treatment plant.

The outfall from the treatment plant travels under the nearby golf course and flows out into the receiving stream some distance from the treatment plant. We recommend the Company check with the Department of Natural Resources to ensure the location would be adequate for the outfall.

(Spratt/Dallas)

Tariff Review

Staff routinely works with utilities to update water and/or sewer tariffs of the individual companies using a generic tariff that is modified for specific operations of the individual companies as they file rate cases with the Commission. Because there are currently three separate tariffs for the three former companies, which are inconsistent and not up to date with current statutes and regulations, Staff will be working with the Company to create a new consolidated tariff and to determine appropriate miscellaneous fees.

(Gateley)

Rate Design

Staff also reviewed the Company's current rate design in its investigation. The current rate structure for all three service areas consists of a flat monthly service charge for sewer service, with different charges for the different service areas. The Company has proposed a single monthly service charge among the three service areas. Staff will review the Company's proposal when the Auditing Unit has completed its report.

(Gateley)

Conclusion and Recommendation

Based on the information from DNR, it seems that modifications needed to be made to the facility at Knob Noster. Staff submitted DRs to the Company asking for engineering studies and information to indicate why the new facilities were a prudent expense but the information received did not adequately satisfy Staff's inquiry. The DR response from 21 Design Group presents evidence that the facilities in Sedalia were failing and the Company made an executive decision to replace the aging facilities all at once rather than phasing it in over time. Staff did not receive any physical numbers or engineering studies that showed what other options were reviewed or what costs were associated with using the existing plant and making some modifications.

Staff recommends:

1) Replace the three existing tariffs with a single consolidated tariff that is updated to comply with current statutes and regulations.

Disposition Agreement Attachment E

Summary of Case Events

Raccoon Creek Utilities, Inc. Case #SR-2016-0202 Summary of Case Events

Date Filed:	February 2, 2016

Day 150: July 1, 2016

Extension? Yes (2x)

If yes, why? First Extension: Staff requested extension of 45 days, in order for Staff and Company to meet/discuss each parties' positions prior to filing a partial or complete disposition agreement.

Second Extension: Staff requested an additional Extension in filing of an executed disposition agreement of 15 days, in order to further negotiate with the Company.

Amount Requested: \$529,557 **Amount Agreed Upon:** No agreement

Item(s) Driving Rate Increase: Significant increases in utility plant investment; increases in operation and maintenance expenses; increases in the Commission's annual utility assessments; increases in taxes; and an increase of management associated with running a professional water company.

Number of Customers: 500

Return on Equity:No agreement

Assessment Current: Yes **Annual Reports Filed:** Yes

Other Open Cases before Commission: Yes

Status with Secretary of State: Good Standing

DNR Violations: Currently in Compliance

Significant Service/Quality Issues: None

In the Matter of the Application of a) Rate Increase for Raccoon Creek) Utility Operating Company, Inc.)	
State of Missouri)	
State of Missouri)) ss. County of Cole)	
AFFIDAVIT OF KIMBERLY K. BOLIN	
STATE OF MISSOURI)	
STATE OF MISSOURI)) ss COUNTY OF COLE)	
Kimberly K. Bolin, of lawful age, on her oath states: (1) that she is a Management Analyst III in the Consumer & Management Analysis Unit of the Management An	Missouri regoing rovided eement; orrect to
JURAT	
Subscribed and sworn before me, a duly constituted and aut Notary Public, in and for the County of Cole, State of Missouri, at my of Jefferson City, on this 30 h day of, 2016.	
DIANNA L. VAUGHT Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: June 28, 2019 Commission Number: 15207377	
My commission expires:	

In the Matter of the Rate Increase for R Utility Operating Co	Raccoon Creek) <u>Case No. SR-2016-0202</u>	
State of Missouri County of Cole)) ss.)	
	AFFIDAVIT OF JONATHAN DALLAS	
STATE OF MISSO) ss	
Operations Technic Public Service Con Disposition Agreem by him; (4) that he and (5) that such r	rallas of lawful age, on his oath states: (1) that he is a cal Specialist II in the Water and Sewer Department of the Mannission; (2) that he participated in the preparation of the forment; (3) that information in this Disposition Agreement was precise has knowledge of matters set forth in the Disposition Agreement are true and convoledge, information and belief.	dissouri regoing rovided eement;
	/Jonathan Dallas	
	JURAT	
Notary Public, in	and sworn before me, a duly constituted and aut and for the County of Cole, State of Missouri, at my o his 19th day of <u>Ougust</u> , 2016.	horized ffice in
DIANNA L. VAUG Notary Public - Notar State of Misson Commissioned for Col My Commission Expires: J Commission Number:	NOTARY PUBLIC NOTARY PUBLIC 10 County 10 pg 28, 2019	
My commission exp	pires:	

In the Matter of the Rate Increase for R Utility Operating Co	accoon Creek		lo. SR-2016-0202	
State of Missouri)) ss.			
County of Cole)			
	AFFIDA	VIT OF CURT B. GA	TELEY	
STATE OF MISSO				
COUNTY OF COLE) ss =)			
Analyst II in the Commission; (2) Disposition Agreem by him; (4) that he	Water and S that he par nent; (3) that in e has knowledo matters set forth	rewer Department rticipated in the formation in this <i>Dis</i> ge of matters set for in the <i>Disposition in</i> the <i>Disp</i>	es: (1) that he is a Utility Poof the Missouri Public Service preparation of the foregon position Agreement was provient in the Disposition Agreement are true and correct forms.	vice oing ded <i>ent</i> ;
		Cuπ Β.	Gateley	
		JURAT		
Subscribed Notary Public, in Jefferson City, on th	and for the C	County of Cole, Sta	ely constituted and authoring the of Missouri, at my office, 2016.	zed • in
DIANNA L. VAUGH Notary Public - Notary State of Missouri Commissioned for Cole My Commission Expires: Ju Commission Number: 15	r Seal i County ne 28, 2019	<u>T</u> NOTAR	Manna L. Vaugut RY PUBLIC	
My commission exp	oires:	June 28, 20	<u>19</u> .	

In the Matter of the Applica Rate Increase for Raccoor Utility Operating Company	Creek) <u>Case No. SR-2016-0202</u>
State of Missouri)	
County of Cole) ss.	
	AFFIDAVIT OF SHANA GRIFFIN
STATE OF MISSOURI))
COUNTY OF COLE) ss)
Auditor III in the Financia (2) that she participated (3) that information in this knowledge of matters set	oful age, on her oath states: (1) that she is a Utility Regulatory al Analysis Unit of the Missouri Public Service Commission; in the preparation of the foregoing <i>Disposition Agreement</i> ; <i>Disposition Agreement</i> was provided by her; (4) that she has forth in the <i>Disposition Agreement</i> ; and (5) that such matters a Agreement are true and correct to the best of her knowledge,
	Shana Griffin
	JURAT
Notary Public, in and for	sworn before me, a duly constituted and authorized or the County of Cole, State of Missouri, at my office in day of, 2016.
DIANNA L. VAUGHT Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: June 28, 2019 Commission Number: 15207377	Dianni L. Vaught- NOTARY PUBLIC
My commission expires: _	June 28, 2019

In the Matter of the Application of a) Rate Increase for Raccoon Creek) Utility Operating Company, Inc.)
State of Missouri)) ss. County of Cole)
AFFIDAVIT OF PAUL R. HARRISON
STATE OF MISSOURI)) ss COUNTY OF COLE)
Paul R. Harrison of lawful age, on his oath states: (1) that he is a Utility Regulatory Auditor IV in the Auditing Department of the Missouri Public Service Commission; (2) that he participated in the preparation of the foregoing Disposition Agreement; (3) that information in this Disposition Agreement was provided by him; (4) that he has knowledge of matters set forth in the Disposition Agreement; and (5) that such matters set forth in the Disposition Agreement are true and correct to the best of his knowledge, information and belief.
Paul R. Harrison
JURAT
Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 19 to day of, 2016.
DIANNA L. VAUGHT Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: June 28, 2019 Commission Number: 15207377
My commission expires:

In the Matter of the Rate Increase for R Utility Operating Co	Raccoon Creek) <u>Case No. SR-2016-0202</u>
State of Missouri)) ss.
County of Cole	
	AFFIDAVIT OF KEENAN B. PATTERSON
STATE OF MISSO	URI)
COUNTY OF COL) ss E)
Utility Engineering Service Commissi Disposition Agreem by him; (4) that h and (5) that such that	Patterson of lawful age, on his oath states: (1) that he is a Specialist II in the Engineering Analysis Unit of the Missouri Public on; (2) that he participated in the preparation of the foregoing nent; (3) that information in this Disposition Agreement was provided e has knowledge of matters set forth in the Disposition Agreement; matters set forth in the Disposition Agreement are true and correct to wledge, information and belief. Keenan B. Patterson
	JURAT
Notary Public, in	and sworn before me, a duly constituted and authorized and for the County of Cole, State of Missouri, at my office in his 19th day of, 2016.
DIANNA L. VAUGHT Notary Public - Notary S State of Missouri Commissioned for Cole C My Commission Expires: Jun Commission Number: 152	County e 28, 2019
My commission ex	pires:

In the Matter of the Application of a) Rate Increase for Raccoon Creek) Case No. SR-2016-0202 Utility Operating Company, Inc.)
State of Missouri)) ss. County of Cole)
AFFIDAVIT OF DAVID A. SPRATT
STATE OF MISSOURI)
) ss COUNTY OF COLE)
David A. Spratt of lawful age, on his oath states: (1) that he is a Utility Operations Technical Specialist II in the Water and Sewer Department of the Missouri Public Service Commission; (2) that he participated in the preparation of the foregoing Disposition Agreement; (3) that information in this Disposition Agreement was provided by him; (4) that he has knowledge of matters set forth in the Disposition Agreement; and (5) that such matters set forth in the Disposition Agreement are true and correct to the best of his knowledge, information and belief.
David A. Spratt
JURAT
Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 19th day of 0 ugust , 2016.
DIANNA L. VAUGHT Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: June 28, 2019 Commission Number: 15207377
My commission expires: June 28, 2019.

In the Matter of the Application of a) Rate Increase for Raccoon Creek) Utility Operating Company, Inc.)
State of Missouri)
) ss. County of Cole)
AFFIDAVIT OF BROOK RICHTER
STATE OF MISSOURI)
) ss COUNTY OF COLE)
Brook Richter of lawful age, on her oath states: (1) that she is a Utility Management Analyst III in the Consumer & Management Analysis Unit of the Missouri Public Service Commission; (2) that she participated in the preparation of the foregoing Disposition Agreement; (3) that information in this Disposition Agreement was provided by her; (4) that she has knowledge of matters set forth in the Disposition Agreement; and (5) that such matters set forth in the Disposition Agreement are true and correct to the best of her knowledge, information and belief.
JURAT
Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 22 day of
My commission expires:

In the Matter of the Application of a) Rate Increase for Raccoon Creek) Utility Operating Company, Inc.)
State of Missouri)) ss. County of Cole)
AFFIDAVIT OF MATTHEW R. YOUNG
STATE OF MISSOURI)) ss COUNTY OF COLE)
Matthew R. Young of lawful age, on his oath states: (1) that he is a Utility Regulatory Auditor IV in the Auditing Department of the Missouri Public Service Commission; (2) that he participated in the preparation of the foregoing Disposition Agreement; (3) that information in this Disposition Agreement was provided by him; (4) that he has knowledge of matters set forth in the Disposition Agreement; and (5) that such matters set forth in the Disposition Agreement are true and correct to the best of his knowledge, information and belief.
Mut Iforms Matthew R. Young
JURAT
Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Jackson, State of Missouri, at my office in Kansas City, on this
My commission expires: 01/07/2018 NOTARY NOTARY NOTARY SEAL Clay County Commission #14451066

SCHEDULE PRH-d3

HAS BEEN DEEMED

HIGHLY CONFIDENTIAL

IN ITS ENTIRETY

SCHEDULE PRH-d4

HAS BEEN DEEMED

HIGHLY CONFIDENTIAL

IN ITS ENTIRETY