MISSOURI PUBLIC SERVICE COMMISSION

STAFF RATE DESIGN REPORT



LAKE REGION WATER & SEWER

CASE NO. WR-2010-0111 & SR-2010-0110

Jefferson City, Missouri January 21, 2010

STAFF RATE DESIGN REPORT

TABLE OF CONTENTS

| I. | Executive Summary | . 1 |
|------|---|-----|
| А | Staff's Rate Design Objectives | . 1 |
| В | . Staff's Plan to Accomplish These Objectives | . 1 |
| II. | Rate Design Water Operations | . 2 |
| А | . Overview | . 2 |
| В | Design of Rates | . 2 |
| С | . Results of Rate Design | . 3 |
| III. | Rate Design Sewer Operations | . 3 |
| А | Overview | . 3 |
| В | Design of Rates | . 4 |
| С | . Results of Rate Design | . 6 |
| IV. | Miscellaneous Tariff Changes | . 6 |

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Lake Region Water & Sewer Company's Application to Implement a General Rate Increase in Water and Sewer Service.

Case No. WR-2010-0111 & SR-2010-0110

AFFIDAVIT OF JAMES M. RUSSO

STATE OF MISSOURI) ss **COUNTY OF COLE**

James M. Russo, employee of the Staff of the Missouri Public Service Commission, being of lawful age and after being duly sworn, states that he has participated in the preparation of the accompanying Staff Report on pages , and the facts therein are true and correct to the best of his knowledge and belief.

lames M. Russo

Subscribed and sworn to before me this \mathscr{U} day of January, 2010.



SUSAN L. SUNDERMEYER My Commission Expires September 21, 2010 Callaway County Commission #06942086

STAFF RATE DESIGN REPORT

I. Executive Summary

A. Staff's Rate Design Objectives

The Staff's rate design objectives are:

- To develop rates reflecting the cost-of-service (COS). Customers pay their actual cost of receiving service and the Company has an opportunity to recover its actual cost of providing service (including an opportunity to receive a return on its investment) by assigning the results of the COS to each water and sewer operation;
- To continue the existing rate design for the Shawnee Bend water and Shawnee Bend sewer operations and change the calculation of the customer charge for the Horseshoe Bend sewer operations to be consistent with the Shawnee Bend operations;
- 3. To collect the Commission-ordered overall change in revenues.

B. Staff's Plan to Accomplish These Objectives

To accomplish these objectives, Staff recommends the following actions:

- Adoption of Staff's proposed rates, which reflect the results of Staff's COS Report that allocates costs to each water and sewer operation;
- 2. The Commission adopts the rates for each water and sewer operation recommended by Staff; and
- Any Commission ordered overall revenue change is implemented according to each rate component of each rate schedule recommended by Staff.

II. Rate Design Water Operations

A. Overview

Staff did not perform a Class Cost of Service Study (CCOS) for the Company's water operations. The Company's water customers consist of 615 residential customers and 33 commercial customers. The commercial customers are primarily restaurants, hotels and condominium units. Due to the size of this Company, Staff did not feel it was necessary to do a CCOS that is normally done in a large utility rate case.

Staff's rate design for the Company's water operations is based on the Water & Sewer Departments small company rate design methodology. The current rates consist of a fixed monthly customer charge and a usage (commodity) charge.

B. Design of Rates

Staff is proposing an equal percentage increase for the customer and commodity charge. Schedules 1, 2, 3, 4, and 5 are the rate design worksheets for the Company's water operations and contain the following pages: Rate-Making Income Statement, Revenue Annualization at Current Rates Worksheet, Development of Tariff Rates Worksheet, Revenue Annualizations at Proposed Worksheet and Billing Comparison Worksheet.

The Rate-Making Income Statement is a summary of the Company's operating revenues at current rates and the Company's COS determined by Staff's auditing department. The last line on the worksheet is the overall revenue increase that Staff is recommending for each water district. See Schedule 1.

The Revenue Annualization at Current Rates worksheet summarizes Staff's annualized number of the Company's water customers. The Company's other revenues

are summarized and the bottom of the page summarizes the total water operating revenues. See Schedule 2.

The Development of Tariff Rates worksheet computes the amount of the increase from the Company's current approved rates to Staff's proposed rates. As stated earlier, Staff is proposing an equal percentage increase for the customer and commodity charge. See Schedule 3.

The Revenue Annualizations at Proposed worksheet is similar in layout to the Revenue Annualization at Current Rates worksheet. The primary differences between the two sheets are this sheet computes Staff's proposed rates based on the proposed rates listed on the preceding Rate Design worksheet and the last two lines compares Staff's increase in revenues at proposed rates verse Staff's recommended increase in operating revenues. See Schedule 4.

The Billing Comparison worksheet compares a typical residential customer's current water rates to Staff's proposed residential customer water rates. This worksheet also summarizes the proposed increase by dollar and percentage amounts. See Schedule 5.

C. Results of Rate Design

The proposed changes in the customer charge and commodity rates are consistent with Staff's expectations in rate design for small water and sewer company's.

III. Rate Design Sewer Operations

A. Overview

Staff did not perform a CCOS for the Company's sewer operations. The Company's Shawnee Bend sewer customers consist of 612 residential customers and 11

commercial customers. The Company's Horseshoe Bend sewer customers consist of 131 residential customers, 2 multi-unit customers and 17 commercial customers. The Company's commercial customers in Shawnee Bend and Horseshoe Bend are primarily restaurants, hotels and condominium units. The usage for the majority of the commercial customers is similar to residential customers.

Staff's rate design for the Company's sewer operations is based on the Water & Sewer Departments small company rate design methodology. The residential customers of Shawnee Bend Service Area and the Horseshoe Bend Service Area are based on a flat rate. The multi-unit and commercial customers of the Shawnee Bend Service Area have a customer charge and a commodity charge for any usage above 6,000 gallons. The commercial customers of the Horseshoe Bend Service Area have a base charge calculated on the highest month's sewer or water use during the previous calendar year with the base charge adjusted in January and a commodity charge.

Staff is proposing a change in rate design for the commercial sewer customers located in the Horseshoe Bend operations area. Staff proposes the design of the commercial sewer customer's customer charge be similar to the design of the customer charge for the Shawnee Bend operations. This rate design is the typical rate design used by Staff in the majority of the company's regulated by the Commission.

B. Design of Rates

Staff is proposing an equal percentage increase for the customer and commodity charge in the Company's water operations and Shawnee Bend sewer operations. Staff is proposing the base charge for the Horseshoe Bend Commercial customers be changed to

a traditional customer charge similar to the customer charge for the Shawnee Bend commercial customers

Schedules 6HB, 6SB, 7HB, 7SB, 8HB, 8SB, 9HB, 9SB, 10HB and 10SB are the rate design worksheets for the Company's Horseshoe Bend and Shawnee Bend sewer operations and contain the following pages: Rate-Making Income Statement, Revenue Annualization at Current Rates Worksheet, Development of Tariff Rates Worksheet, Revenue Annualizations at Proposed Worksheet and Billing Comparison Worksheet.

The Rate-Making Income Statement is a summary of the Company's operating revenues at current rates and the Company's cost-of-service determined by the Staff's auditing department. The last line on the worksheet is the overall revenue increase that Staff is recommending for each sewer district. See Schedules 6HB and 6SB.

The Revenue Annualization at Current Rates worksheet summarizes Staff's annualized number of the Company's water customers. The Company's other revenues are summarized and the bottom of the page summarizes the total sewer operating revenues. See Schedules 7HB and 7SB.

The Development of Tariff Rates worksheet computes the amount of the increase from the Company's current approved rates to Staff's proposed rates. As stated earlier, Staff is proposing an equal percentage increase for the customer and commodity charge. See Schedules 8HB and 8SB.

The Revenue Annualizations at Proposed worksheet is similar in layout to the Revenue Annualization at Current Rates worksheet. The primary differences between the two sheets is that this sheet computes Staff's proposed rates based on the proposed rates listed on the preceding Rate Design worksheet and the last two lines compares Staff's

increase in revenues at proposed rates verse Staff's recommended increase in operating revenues. See Schedules 9HB and 9SB.

The Billing Comparison worksheet compares a typical residential customer's current sewer rates to Staff's proposed residential customer sewer rates. This worksheet also summarizes the proposed increase by dollar and percentage amounts. See Schedules 10HB and 10SB.

C. Results of Rate Design

The proposed change in the customer charge for the Horseshoe Bend Operations results in consistent rate design for all of the customers of the Company. Staff believes the increase in the commodity charge provides an added economic incentive to customers with high Inflow and Infiltration (I/I) to make necessary repairs and improvements to their collection systems.

Overall, the proposed changes in the customer charge and commodity rates are consistent with Staff's expectations in rate design for small water and sewer company's.

IV. Miscellaneous Tariff Changes

The Staff is recommending two changes in the Company's Schedule of Service Charges. The proposed changes are increasing the returned check charge in both the water and sewer tariffs and adding language to the Disconnect for Non-payment, Special Request Service Termination or Reconnection Charge section of the Company's water tariff.

The Company's returned check charge is currently \$15.00. Staff proposes increasing this cost to \$25.00. The cost incurred by the Company for such items as bank charges, accounting, tracking, monitoring and additional notices exceeds the current fee.

In addition, this would bring the returned check charge to a level that is consistent with Staff's findings for similar Company's.

Current language does not include any language that allows the Company to disconnect a customer for any reason except upon the request of the customer. Staff proposes the following language be added to the beginning of the paragraph under the heading Disconnect for Non-payment, Special Request Service Termination or Reconnection Charge located on sheet 7-A of the Company's water tariff:

The Company may disconnect a customer for non-payment, pursuant to 4 CSR 240-13.050 of the Commission Rules, or,

Schedule 11 is a Sample Tariff Sheet 7-A with Staff's proposed tariff language change.

Staff Expert: James M. Russo

Rate Making Income Statement-Water

| | Operating Revenues at Current Rates | | | | | | |
|---|--|----|---------|--|--|--|--|
| 1 | Tariffed Rate Revenues * | \$ | 173,441 | | | | |
| 2 | Other Operating Revenues * | \$ | 966 | | | | |
| 3 | Total Operating Revenues | \$ | 174,407 | | | | |
| 4 | * See "Revenues - Current Rates" for Details | | | | | | |

Cost of Service

Amount Item Pumping Equipment-Purchased Power \$ 11,519 1 Water Treatment Expense-Chemicals \$ 2 3,367 \$ Water Treatment -Testing/Laboratory Fees 1,025 3 \$ Supplies & Materials 1,173 4 Tools & Shop Supplies \$ 83 5 Maintenance of Well #1 \$ 460 6 Maintenance of Well #2 \$ 223 7 Maintenance of Mains \$ 2,000 8 \$ Maintenance of Services 1,120 9 10 Maintenance of Other Plant \$ 706 11 Accounting Fee-Contracted \$ 2,789 12 Legal Fees-Contracted \$ 1,652 13 PWSD #4 Labor-Contracted \$ 37.215 14 Rent \$ 4,594 15 Rent-Lake Region \$ 2,063 \$ 16 Property Insurance 463 \$ 663 17 Auto Insurance \$ 18 General Liability Insurance 720 \$ 19 Other Insurance \$ 20 Office Supplies 4,207 \$ 21 Billing Expenses 1,351 22 Executive Management Oversight \$ 27,901 23 Outside Services \$ 242 24 Telephone Expense \$ 318 25 Travel & Entertainment \$ 40 \$ 26 Transportation Expense 6,784 27 Rate Case Expense \$ 150 28 Customer Refunds \$ 222 29 Bad Debt Expense \$ 176 \$ 200 30 MO DNR Fees \$ 31 Secretary of State 10 32 Regulatory Commission Expense \$ 1,441 \$ 33 Miscellaneous General Expenses 338 34 Sub-Total Operating Expenses \$ 115,215 35 Property Taxes \$ 146 1,306 36 Real Estate Taxes \$ 37 Other Taxes \$ 38 Federal Unemployment Taxes \$ 39 State Unemployment Taxes \$ 40 State & Federal Income Taxes \$ 4,203 \$ 41 Sub-Total Taxes 5,655 42 Depreciation Expense \$ 84,207 \$ 43 Interest Expense 50,843 44 Amortization Expense \$ 45 Amortization Expense-Other \$ 46 Amortization Expense-CIAC \$ (48.889)47 Sub-Total Depreciation/Amortization \$ 86,161 \$ 48 Return on Rate Base 16,879 \$ 49 Total Cost of Service 223,910 50 Overall Revenue Increase Needed \$ 49,503

Revenue Annualizations at Current Rates-Water

Annualized Customer Counts and Customer Charge Revenues

Retail Metered Customers Annual Meter Size Residential Commercial **Total Meters** Rate * Revenue 5/8" (inc. 3,000 gpm) \$ 78,986 10 583 \$ 11.29 573 3/4" (inc. 4,500 gpm) 0 0 0 \$ 14.53 \$ 1" (inc. 7,500 gpm) 13 7 20 \$ 21.01 \$ 5,042 1.5" (inc. 15,000 gpm) 2 23 25 37.21 \$ 11,163 \$ 2" (inc. 24,000 gpm) 6 10 16 56.65 \$ 10,877 \$ 4" (inc. 75,000 gpm) 0 3 3 \$ 166.81 \$ 6,005 3,946 6"+ (inc. 150,000 gpm) 0 1 1 \$ 328.81 \$ 615 33 648 \$ 116,019 Total

*monthly service charge gpm=gallons per month

Discounts Earned

Total Other Revenues

Annualized Commodity Sales - Volumes and Revenues

\$ \$

-966

| sales shown in Mgallons Meter Size 5/8" 3/4" 1" 1.5" | Residential - - - - | Commercial 26,584.3 - - - | Total Sales 26,584.3 - - - | \$ \$ \$ \$ | Rate 2.160 2.160 2.160 2.160 | R \$ \$ \$ \$ \$ | Annual evenue 57,422 - - - |
|---|-------------------------------------|---------------------------------------|--|----------------|--|------------------------------------|---|
| 2" 4" 6"+ Total Net Annualized Comm | - - - - nodity Revenues | 26,584.3 | - - 26,584.3 | \$ \$ \$ | 2.160 2.160 2.160 | \$ \$ \$ \$ | - - 57,422 57,422 |
| | Other Op | erating Reven | ues | | | | |
| Bulk Water Sales Sales to Other Public A Late Charge Fees Turn-Off/Turn-On/Pena Other Water Revenues Rents from Water Prop | alty Charges | d | | \$ \$ \$ \$ \$ | - 280 - 686 - | | |

| Total Operating Revenues | | | | |
|---|-----------|-------------------|--|--|
| Service Charges - Retail Customers Commodity Revenues - Retail Customers | \$ | 116,019 57,422 | | |
| Sub-Total Tariffed Rate Revenues | <u>\$</u> | 173,441 | | |
| Other Operating Revenues | \$ | 966 | | |
| Total Operating Revenues | \$ | 174,407 | | |

Development of Tariffed Rates-Water

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

| Revenues Generated by Current Tariffed Rates | \$ 173,441 |
|--|------------|
| Agreed-Upon Overall Revenue Increase | \$ 49,503 |
| Percentage Increase Needed | 28.542% |

| Metered Customer Rates | | | | | | | | |
|------------------------|----|------------------------------|----|-----------------------------|----|-------------------------|----|-----------------------|
| Meter Size | S | Current Service Charge | 5 | oposed Service Charge | ι | urrent Jsage Rate | U | posed sage Rate |
| 5/8" (inc. 3,000 gpm) | \$ | 11.29 | \$ | 14.51 | \$ | 2.160 | \$ | 2.78 |
| 3/4" (inc. 4,500 gpm) | \$ | 14.53 | \$ | 18.68 | \$ | 2.160 | \$ | 2.78 |
| 1" (inc. 7,500 gpm) | \$ | 21.01 | \$ | 27.01 | \$ | 2.160 | \$ | 2.78 |
| 1.5" (inc. 15,000 gpm) | \$ | 37.21 | \$ | 47.83 | \$ | 2.160 | \$ | 2.78 |
| 2" (inc. 24,000 gpm) | \$ | 56.65 | \$ | 72.82 | \$ | 2.160 | \$ | 2.78 |
| 4" (inc. 75,000 gpm) | \$ | 166.81 | \$ | 214.42 | \$ | 2.160 | \$ | 2.78 |
| 6"+ (inc. 150,000 gpm) | \$ | 328.81 | \$ | 422.66 | \$ | 2.160 | \$ | 2.78 |

Revenue Annualizations at Proposed Rates-Water

Annualized Customer Counts and Customer Charge Revenues

| | Retail Metered Customers | | | | | | | |
|---------------------------------|--------------------------|------------|--------------|----|---------------------|----|-------------------|--|
| Meter Size | Residential | Commercial | Total Meters | | sidential Rate * | | Annual Revenue | |
| 5/8" (inc. 3,000 gpm) | 573 | 10 | 583 | \$ | 14.51 | \$ | 101,528 | |
| 3/4" (inc. 4,500 gpm) | 0 | 0 | 0 | \$ | 18.68 | \$ | - | |
| 1" (inc. 7,500 gpm) | 13 | 7 | 20 | \$ | 27.01 | \$ | 6,482 | |
| 1.5" (inc. 15,000 gpm) | 23 | 2 | 25 | \$ | 47.83 | \$ | 14,349 | |
| 2" (inc. 24,000 gpm) | 6 | 10 | 16 | \$ | 72.82 | \$ | 13,981 | |
| 4" (inc. 75,000 gpm) | 0 | 3 | 3 | \$ | 214.42 | \$ | 7,719 | |
| 6"+ (inc. 150,000 gpm) | 0 | 1 | 1 | \$ | 422.66 | \$ | 5,072 | |
| Total monthly service charge | 615 | 33 | 648 | | | \$ | 149,131 | |

Annualized Commodity Sales - Volumes and Revenues

| shown in Mgallons Meter Size | Residential | Commercial | Total Sales | sidential Rate | Annual evenue |
|---------------------------------|-------------|------------|-------------|-------------------|------------------|
| 5/8" | - | 26,584.3 | 26,584.3 | \$ 2.777 | \$ 73,811 |
| 3/4" | - | - | - | \$ 2.777 | \$ - |
| 1" | - | - | - | \$ 2.777 | \$ - |
| 1.5" | - | - | - | \$ 2.777 | \$ - |
| 2" | - | - | - | \$ 2.777 | \$ - |
| 4" | - | - | - | \$ 2.777 | \$ - |
| 6"+ | - | - | - | \$ 2.777 | \$ - |
| Total | - | 26,584.3 | 26,584.3 | | \$ 73,811 |

volumes adjusted as needed per net revenue annualization at current rates

| Other Operating Revenues | | | | |
|--|----|-----|--|--|
| | | | | |
| Bulk Water Sales | | | | |
| Sales to Other Public Authorities | | | | |
| Late Charge Fees | \$ | 280 | | |
| Turn-Off/Turn-On/Penalty Charges | | | | |
| Other Water Revenues | \$ | 686 | | |
| Rents from Water Property - Tower Rental | | | | |
| Discounts Earned | | | | |
| Total Other Revenues | \$ | 966 | | |
| | | | | |

| Total Operating Revenues | | | | | |
|---------------------------------------|----|---------|--|--|--|
| Service Charges - Retail Customers | \$ | 149,131 | | | |
| Commodity Revenues - Retail Customers | \$ | 73,811 | | | |
| Sub-Total Tariffed Rate Revenues | \$ | 222,943 | | | |
| Other Operating Revenues | \$ | 966 | | | |
| Total Revenues at Proposed Rates | \$ | 223,909 | | | |

Revenue Check - Proposed Rates vs. Current Rates Total Dave

| Revenue oneck - rioposed rates vs. or | inchi Natos | |
|--|-------------|---------|
| Total Revenues at Proposed Rates | \$ | 223,909 |
| Total Revenues at Current Rates | \$ | 174,407 |
| Increase In Revenues at Proposed Rates | \$ | 49,502 |
| Agreed-Upon Increase in Operating Revenues | \$ | 49,503 |
| | | |

Residential Customer Bill Comparison-Water

| | Ra | ates for 5/8" N | leter | |
|--------------------------------|-------------|-----------------|------------|------------|
| Current Base | | osed Base | Current | Proposed |
| Customer Charge | | ner Charge | Usage Rate | Usage Rate |
| \$11.29 | | 14.51 | \$2.16 | \$2.78 |
| current service charge is mont | | 5/8" meter. | | |
| current service chargeincludes | - | | | |
| usage rate is per 1,000 gallon | s used | | | |
| MONTHLY BILL | COMPARIS | SON | | |
| 6,000 gallons/r | nonth usage | | | |
| Current Rates | | | | |
| Customer Charge | \$ | 11.29 | | |
| Usage Charge | \$ | 6.48 | | |
| Total Bill | \$ | 17.77 | | |
| | | | | |
| Proposed Rates | | | | |
| Customer Charge | \$ | 14.51 | | |
| Usage Charge | \$ | 8.33 | | |
| Total Bill | \$ | 22.84 | | |
| INCREASES | | | | |
| Customer Charge | | | | |
| \$ Increase | • | 3.22 | | |
| % Increase | | 8.54% | | |
| | - | 0.0470 | | |
| Usage Charge | | | | |
| \$ Increase | 9 | 51.85 | | |
| % Increase | 2 | 8.54% | | |
| Total Bill | | | | |
| \$ Increase | 9 | 5.07 | | |
| % Increase | 2 | 8.54% | | |

Shawnee Bend

Rate Making Income Statement-Sewer

| | Operating Revenues at Current Rates | | | | | | |
|---|---------------------------------------|----|---------|--|--|--|--|
| 1 | Tariffed Rate Revenues * | \$ | 181,197 | | | | |
| 2 | Other Operating Revenues * | \$ | - | | | | |
| 3 | Total Operating Revenues | \$ | 181,197 | | | | |
| | * One "Development Deter" for Deteile | | | | | | |

4 * See "Revenues - Current Rates" for Details

| | Cost of Service | | |
|----|---|---|----------|
| | Item | | Amount |
| 1 | Purchased Wastewaer Maintenenance | \$ | 1,827 |
| 2 | Power for Treatment Plant | \$ | 18,490 |
| 3 | Sludge Removal | \$ | 2,750 |
| 4 | Effluent Tesing Expense | \$ | 3,397 |
| 5 | Chemicals | \$ | 2,514 |
| 6 | Shawnee Bend Operating Expense | \$ | 1,344 |
| 7 | Maintenance Expense-Supplies & Materials | \$ | 1,218 |
| 8 | Maintenance Expense-Sewer Suppies | \$ | 1,369 |
| 9 | Maintenance Expense-Lagoon Supplies | \$ | - |
| 10 | Maintenance Expense-Operating Expense | \$ | 639 |
| 11 | Maintenance Expense-Tools & Shop Supplies | \$ | 387 |
| 12 | Maintenance Expense-Treatment Equipment | \$ | 946 |
| | Maintenance Expense-Misc. Operating Expense | \$ | 352 |
| | Accounting Fees-Contracted | \$ | 2,928 |
| 15 | PWSD #4 Labor-Contracted | \$ | 39,067 |
| 16 | Legal Fees-Contracted | \$ | 1,800 |
| | Rent | \$ | 4,822 |
| | Rent-Lake Office | \$ | 2,165 |
| 19 | Property Insurance | \$ | 463 |
| | Auto Insurance | \$ | 1,912 |
| | General Liability | \$ | 755 |
| | Other Insurance | \$ | - |
| | Office Supplies | \$ | 4,336 |
| | Billing Expenses | ¢ | 1,299 |
| | Executive Management Oversight | Ψ ¢ | 27,901 |
| | Outside Services | ¢ | 254 |
| | Telephone Expense | Ψ ¢ | 334 |
| | Travel & Entertainment Expense | ¢ ¢ | 42 |
| | Transportation Expense | Ψ ¢ | 7,121 |
| | Rate Case Expense | φ ¢ | 150 |
| | Customer Refunds | φ Φ | 233 |
| | Bad Debt Expense | ¢ ¢ | 185 |
| | • | ¢ ¢ | 65,305 |
| 33 | Interest Expense License & Permits | φ ¢ | |
| | License & Permits-Other | ¢ ¢ | 3,147 |
| | | ¢ D | - |
| | Regulatory Commission Expense | ъ \$ | 19,896 |
| | Miscellaneous General Expenses | <u> </u> | 355 |
| | Sub-Total Operating Expenses | \$ | 219,703 |
| | Property Taxes | \$ | 148 |
| | Real Estate Taxes | \$ | 1,324 |
| | Employer FICA Taxes | \$ \$ \$ | - |
| | Federal Unemployment Taxes | \$ | - |
| | Other Taxes | \$ | - |
| | State & Federal Income Taxes | \$ | 5,399 |
| | Sub-Total Taxes | \$ | 6,871 |
| | Depreciation Expense | \$ | 115,174 |
| | Amortization Expense | \$ \$ | - |
| | Amortization Expense-Other | \$ | - |
| | Amortization of CIAC | \$ | (59,228) |
| | Sub-Total Depreciation/Amortization | \$ | 55,946 |
| | Return on Rate Base | \$ | 21,680 |
| 52 | Total Cost of Service | \$ | 304,200 |
| 53 | Overall Revenue Increase Needed | \$ | 123,003 |
| 50 | | Ψ | 120,000 |

Shawnee Bend

Revenue Annualizations at Current Rates-Sewer

Annualized Customer Counts and Customer Charge Revenues

| | | | Retail Customers | | | | |
|---------------|--------------|-------------------------------------|------------------|----|---------|--|--|
| Customer | | Shawnee Bend Service Area Annual | | | | | |
| Туре | Total Meters | F | Rate * | F | Revenue | | |
| Single Family | 612 | \$ | 21.96 | \$ | 161,274 | | |
| Multi-Unit | 0 | \$ | 21.96 | \$ | - | | |
| Commercial | 11 | \$ | 21.96 | \$ | 2,899 | | |
| Total | 623 | | | \$ | 164,173 | | |

*monthly service charge

Service Charges - Retail Customers

Sub-Total Tariffed Rate Revenues

Other Operating Revenues

Total Operating Revenues

Commodity Revenues - Retail Customers

Total Operating Revenues

Discounts Earned

Total Other Revenues

**base charge is commuted on highest month's sewer or water usage in previous calendar year.

| - | | Shaw | nee Bend Service | Area | | | | | |
|---|----------------------|-------------|--------------------------|------|-------|----|--------|--|--------|
| Customer | | | | | | | Annual | | |
| Туре | Residential | Business | siness Total Sales Rate* | | Rate* | | Rate* | | evenue |
| Single Family | - | - | - | \$ | - | \$ | - | | |
| Multi-Unit | - | - | - | \$ | 3.66 | \$ | - | | |
| Commercial | - | 4,651.4 | 4,651.4 | \$ | 3.66 | \$ | 17,024 | | |
| Total | - | 4,651.4 | 4,651.4 | | | \$ | 17,024 | | |
| per thousand gallons sales in mgallons | s over 6,000 gallons | | | | | | | | |
| | Other C | Derating Re | evenues | | | | | | |
| Sales to Other P | ublic Authorities | | | \$ | - | | | | |
| Late Charge Fee | | | | \$ | - | | | | |
| Turn-Off/Turn-On/Penalty Charges \$ | | | | | - | | | | |
| Aiscellaneous R | \$ | - | | | | | | | |
| Rents from Wate | | | | \$ | - | | | | |
| | in oponly 100 | Ψ | | | | | | | |

\$

\$

\$

\$

\$

164,173

17,024

181,197

181,197

\$

\$

Shawnee Bend Development of Tariffed Rates-Sewer

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

| Revenues Generated by Current Tariffed Rates | \$ 181,197 |
|--|------------|
| Agreed-Upon Overall Revenue Increase | \$ 123,003 |
| Percentage Increase Needed | 67.884% |

| Metered Customer Rates | | | | | | | | |
|-------------------------------------|----|-------|----|-------|----|-------|----|-------------------------|
| Customer Service Service Usage Usag | | | | | | | | oposed Jsage Rate |
| Single Family | \$ | 21.96 | \$ | 36.87 | \$ | - | \$ | - |
| Multi-Unit | \$ | 21.96 | \$ | 36.87 | \$ | 3.660 | \$ | 6.145 |
| Commercial | \$ | 21.96 | \$ | 36.87 | \$ | 3.660 | \$ | 6.145 |

Shawnee Bend

Revenue Annualizations at Proposed Rates-Sewer

| Annualized Customer Counts and Customer Charge Revenues | | | | | | | | |
|---|-----------------------|---------------------|------------|------------------|------|-----------|-------------------|--|
| | | Re | tail Met | ered Custon | ners | | | |
| Customer Type | Total Meters | Rate * | - | Annual evenue | | | | |
| Single Family | 612 | \$ 36.87 | \$ | 270,753 | | | | |
| Multi-Unit | 0 | \$ 36.87 | \$ | | | | | |
| Commercial | 11 | \$ 36.87 | \$ | 4,866 | | | | |
| Total monthly service cha | 623 | | \$ | 275,619 | | | | |
| monuny service cha | - | | | | | | | |
| | Annual | zed Commo | odity S | Sales - Vol | umes | s and Rev | renues | |
| Customer Type | Residential | Business | Tot | tal Sales | | Rate | Annual Revenue | |
| Single Family | - | - | | - | \$ | - | \$ - | |
| Multi-Unit | - | - | | - | \$ | 6.145 | \$ - | |
| Commercial | - | 4,651.4 | | 4,651.4 | \$ | 6.145 | \$ 28,581 | |
| Total | - | 4,651.4 | | 4,651.4 | | | \$ 28,581 | |
| sales in mgallons volumes adjusted as | s needed per net reve | nue annualization a | at current | rates | | | | |
| | | | | | | | | |
| | Other | Operating F | Reven | ues | | | | |
| | | . 0 | | | | | | |
| Sales to Other I | Public Authorities | | | | | | | |
| Late Charge Fe | es | | | | | | | |
| | On/Penalty Charge | | | | | | | |
| | Revenues - Servic | | | | | | | |
| | er Property - Tow | er Rental | | | | | | |
| Discounts Earned | | | | | | | | |

Total Other Revenues

\$-

Total Operating Revenues

| Service Charges - Retail Customers | \$ 275,619 |
|---------------------------------------|---------------|
| Commodity Revenues - Retail Customers | \$ 28,581 |
| Sub-Total Tariffed Rate Revenues | \$ 304,200 |
| Other Operating Revenues | \$ - |
| Total Revenues at Proposed Rates | \$ 304,200 |

| Revenue Check - Proposed Rates vs. Current Rates | | | | | |
|--|----|---------|--|--|--|
| Total Revenues at Proposed Rates | \$ | 304,200 | | | |
| Total Revenues at Current Rates | \$ | 181,197 | | | |
| Increase In Revenues at Proposed Rates | \$ | 123,003 | | | |
| Agreed-Upon Increase in Operating Revenues | \$ | 123,003 | | | |

Shawnee Bend Residential Customer Bill Comparison-Sewer

Rates for Single Family Customer

| Current Base | Proposed Base |
|-----------------|-----------------|
| Customer Charge | Customer Charge |
| \$21.96 | \$36.87 |

current service charge is monthly charge

MONTHLY BILL COMPARISON

| Current Rates Customer Charge Usage Charge Total Bill | \$ \$ \$ | 21.96 - 21.96 |
|---|----------------|---------------------|
| Proposed Rates Customer Charge Usage Charge Total Bill | \$ \$ \$ | 36.87 - 36.87 |
| INCREASES | | |
| Customer Charge \$ Increase % Increase | | 14.91 7.88% |
| Total Bill \$ Increase % Increase | | 14.91 7.88% |

Horseshoe Bend

Rate Making Income Statement-Sewer

| | Operating Revenues at Current Rates | | | | | |
|---|--|----|---------|--|--|--|
| 1 | Tariffed Rate Revenues * | \$ | 369,657 | | | |
| 2 | Other Operating Revenues * | \$ | 2,342 | | | |
| 3 | Total Operating Revenues | \$ | 371,999 | | | |
| 4 | * Soo "Povonuos - Current Pates" for Details | | | | | |

4 * See "Revenues - Current Rates" for Details

| | Cost of Service | |
|---|-----------------------------|----------|
| Item | | Amount |
| 1 Purchased Wastewaer Maintener | | 3,250 |
| 2 Power for Treatment Plant | \$ | 12,331 |
| 3 Sludge Removal | \$ \$ \$ \$ | 10,930 |
| 4 Chemicals | \$ | 4,615 |
| 5 Effluent Tesing Expense | \$ | 4,761 |
| 6 Sewer Operating Expenses | \$ | 2,561 |
| 7 Maintenance Expense-Supplies & | | 2,167 |
| 8 Maintenance Expense-Sewer Su | opies \$ | 2,437 |
| 9 Maintenance Expense-Lagoon S | upplies \$ | - |
| 10 Maintenance Expense-Operating | | 1,137 |
| 11 Maintenance Expense-Tools & S | nop Supplies \$ | 688 |
| 12 Maintenance Expense-Treatment | | 1,682 |
| 13 Maintenance Expense-Misc. Ope | | - |
| 14 Accounting Fees-Contracted | \$ | 5,210 |
| 15 Legal Fees-Contracted | \$ | 2,250 |
| 16 PWSD #4 Labor-Contracted | \$ | 69,516 |
| 17 Rent | \$ | 8,581 |
| 18 Rent-Lake Region | \$ | 3,853 |
| • | φ ¢ | |
| 19 Property Insurance | \$ \$ | 2,809 |
| 20 Auto Insurance | Þ | 3,401 |
| 21 General Liability | \$ | 1,343 |
| 22 Other Insurance | \$ | - |
| 23 Office Supplies | \$ | 974 |
| 24 Billing Expenses | \$ | 313 |
| 25 Executive Management Oversite | \$ | 13,303 |
| 26 Outside Services | \$ | 452 |
| 27 Telephone Expense | \$ | 595 |
| 28 Travel & Entertainment Expense | \$ \$ | 74 |
| 29 Transportation Expense | \$ | 12,673 |
| 30 Rate Case Expense | \$ | 150 |
| 31 Customer Refunds | \$ | 414 |
| 32 Bad Debt Expense | \$ | 329 |
| 33 Interest Expense | \$ | 15,565 |
| 34 License & Permits | \$ | 9,292 |
| 35 License & Permits-Other | \$ \$ | - |
| 36 Regulatory Commission Expense | \$ | 35,403 |
| 37 Miscellaneous General Expenses | | 632 |
| 38 Sub-Total Operating Expenses | \$ | 233,691 |
| 39 Property Taxes | | 78 |
| 40 Real Estate Taxes | \$ | 695 |
| 41 Employer FICA Taxes | \$ | |
| 42 Federal Unemployment Taxes | Ψ ¢ | _ |
| 43 Other Taxes | \$ \$ \$ | - |
| 44 State & Federal Income Taxes | ¢ | 1,287 |
| 44 State & Federal Income Taxes 45 Sub-Total Taxes | | |
| | \$ | 2,060 |
| 46 Depreciation Expense | Ф Ф | 105,198 |
| 47 Amortization Expense | Þ | - |
| 48 Amortization Expense-Other | \$ \$ \$ zation \$ | - |
| 49 Amortization of CIAC | | (29,931) |
| 50 Sub-Total Depreciation/Amortiz | zation \$ | 75,267 |
| 51 Return on Rate Base | \$ | 5,167 |
| 52 Total Cost of Service | \$ | 316,185 |
| 53 Overall Revenue Increase Need | led \$ | (55,814) |
| | ¥ | (00,014) |

Horseshoe Bend

Revenue Annualizations at Current Rates-Sewer

Annualized Customer Counts and Customer Charge Revenues

| Retail Customers | | | | | |
|------------------|--------------|----|--------|----|-------------------|
| Customer Type | Total Meters | | Rate * | | Annual Revenue |
| Residential | 131 | \$ | | \$ | 39,834 |
| Multi-Unit | 2 | \$ | 25.34 | \$ | 608 |
| Commercial** | 17 | \$ | 377.34 | \$ | 76,977 |
| Total | 150 | | | \$ | 117,419 |

*monthly service charge

**base charge is average for all commercial customers based on highest month's sewer or water usage in previous calendar year.

| | Annualize | d Commod | ity Sales - Volu | mes | and Rev | /enues |
|-----------------------------------|---------------------|--------------|-------------------|----------|-----------------|------------|
| | | Horse | shoe Bend Service | e Area | a | |
| Customer | Non Racquet | Racquet | | | | Annual |
| Туре | Club | Club | Total Sales | | Rate* | Revenue |
| Commercial | 46,327.5 | 24,327.5 | 70,655.0 | \$ | 3.57 | \$ 252,238 |
| Total sales in mgallons | 46,327.5 | 24,327.5 | 70,655.0 | | | \$ 252,238 |
| | Other O | perating Rev | venues | | | |
| Sales to Other P | ublic Authorities | | | \$ | - | |
| Late Charge Fee | es | | | \$ | 372 | |
| | n/Penalty Charges | | | \$ | - | |
| Turn-Off/Turn-O | | | | | 1 070 | |
| | evenues - Other | | | J | 1.970 | |
| Miscellaneous R | 01011000 011101 | Rental | | \$ \$ | 1,970 - | |
| Miscellaneous R | er Property - Tower | Rental | | \$ \$ | 1,970 - - | |

Total Operating Revenues

| Service Charges - Retail Customers | \$ 117,419 |
|---------------------------------------|---------------|
| Commodity Revenues - Retail Customers | \$ 252,238 |
| Sub-Total Tariffed Rate Revenues | \$ 369,657 |
| Other Operating Revenues | \$ 2,342 |
| Total Operating Revenues | \$ 371,999 |

Horseshoe Bend Development of Tariffed Rates-Sewer

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

| Revenues Generated by Current Tariffed Rates | \$ 369,657 |
|--|-------------|
| Agreed-Upon Overall Revenue Increase | \$ (55,814) |
| Percentage Increase Needed | -15.099% |

| | | Meter | red Cu | ustomer | Rates | ; | |
|---------------|----|--------------------|--------|------------------|-------|-----------------|-----------------|
| Customer | | Current Service | | oposed ervice | | urrent Jsage | oposed Isage |
| Туре | C | Charge | С | harge | | Rate | Rate |
| Single Family | \$ | 25.34 | \$ | 21.51 | \$ | 3.570 | \$ 3.031 |
| Multi-Unit | \$ | 25.34 | \$ | 21.51 | \$ | 3.570 | \$ 3.031 |
| Commercial | \$ | 377.34 | \$ | 21.51 | \$ | 3.570 | \$ 3.894 |

Commercial customer service charge is proposed to be the same as for single family and multiunit customers. The additional funds required to be collected have been added to the commercial customers commodity charge.

Horseshoe Bend

Revenue Annualizations at Proposed Rates-Sewer

| | Annualized | d Customer | Coun | ts and Cus | stome | er Charge | e Revenues |
|--|---|-------------|---------|--------------|--------|-----------|------------|
| | | R | etail M | etered Custo | mers | | |
| Customer | | | - | Annual | | | |
| Туре | Total Meters | Rate * | R | evenue | | | |
| Single Family | 131 | \$ 21.51 | \$ | 33,820 | | | |
| Multi-Unit | 2 | \$ 21.51 | \$ | 516 | | | |
| Commercial | 17 | \$ 21.51 | \$ | 4,388 | | | |
| Total | 150 | | \$ | 38,724 | | | |
| monthly service cha | irge | | | | | | |
| | Δηριμα | lized Comn | noditv | Salos - Vo | lumo | s and Ro | VANUAS |
| | Annua | | liouity | | Turric | 5 und rec | Venues |
| Customer | | | | | | | Annual |
| Type | Residential | Business | То | tal Sales | | Rate | Revenue |
| Commercial | 46,327.5 | 24,327.5 | | 70,655.0 | \$ | 3.894 | \$ 275,119 |
| Total | 46,327.5 | 24,327.5 | | 70,655.0 | | | \$ 275,119 |
| sales in mgallons | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | Other | Operating I | Reven | ues | | | |
| | | | | | | | |
| | Public Authorities | | | | • | | |
| | | | | | \$ | 372 | |
| Late Charge Fe | | | | | | | |
| Turn-Off/Turn-C | , , | 5 | | | - | | |
| Turn-Off/Turn-C Miscellaneous F | Revenues - Other | | | | \$ | 1,970 | |
| Turn-Off/Turn-C Miscellaneous F Rents from Wat | Revenues - Other er Property - Tow | | | | \$ | 1,970 | |
| Turn-Off/Turn-C Miscellaneous F | Revenues - Other er Property - Tow ed | | | | \$ | 1,970 | |

Total Operating Revenues

| \$ 38,724 |
|---------------|
| \$ 275,119 |
| \$ 313,843 |
| \$ 2,342 |
| \$ 316,185 |
| |
| \$ \$ |

| Revenue Check - Proposed Rates vs. C | uneni Nales | |
|--|-------------|----------|
| Total Revenues at Proposed Rates | \$ | 316,185 |
| Total Revenues at Current Rates | \$ | 371,999 |
| Increase In Revenues at Proposed Rates | \$ | (55,814) |
| Agreed-Upon Increase in Operating Revenues | \$ | (55,814) |

Horseshoe Bend Residential Customer Bill Comparison-Sewer

Rates for Single Family Customer

| Current Base | Proposed Base |
|-----------------|-----------------|
| Customer Charge | Customer Charge |
| \$25.34 | \$21.51 |

current service charge is monthly charge

MONTHLY BILL COMPARISON

| Current Rates Customer Charge Usage Charge Total Bill | \$ 25.34 \$ - \$ 25.34 |
|---|------------------------------|
| Proposed Rates Customer Charge Usage Charge Total Bill | \$ 21.51 \$ - \$ 21.51 |
| INCREASES | |
| Customer Charge \$ Increase % Increase | (\$3.83) -15.10% |
| Total Bill \$ Increase % Increase | (\$3.83) -15.10% |

| P.S.C. MO No. 1 | 1 st R | evised Sheet No. 7 |
|--|--|---|
| | Cancelling Or | iginal Sheet No. 7 |
| Lake Region Water & Sewer Company | For: <u>Miss</u> | ouri Service Areas |
| SCHEDULE OF R FOR WATER SER | | |
| – DISCONNECT FOR NON-PAYMENT, SPECIAL REQU RECONNECTION CHARGE: | EST SERVICE TEH | RMINATION OR * |
| The Company may disconnect a customer for non-paymen Commission Rules, or, upon request of the customer, the c reconnect a water service. The cost for either service durin to 4:00 P.M. Monday through Friday excluding holidays, s The cost during other than normal working hours shall be s termination or reconnection which allows the Company five done at no charge. | ompany will either to ng normal working h hall be \$31.00 payab \$70.00. Routine requ | erminate or ours of 8:30 A.M. ble in advance. uest for |
| LATE PAYMENT CHARGE: May be assessed in accordance with Rule 10 Applies only when disconnect is mailed. Only one charge applies to a customer that is billed For water and sewer service on the same bill. | \$6.50 per notice r | nonth |
| RETURN CHECK CHARGE: May be assessed in accordance with Rule 10. Only one charge per returned check | \$15.00 | |
| METER TESTING CHARGE: May be assessed in accordance with Rule 12. | \$55.00 | |
| * Indicates New Rate or Text + Indicates Changed Rate or Text | | |
| ue Date: January 4, 2007 Month/Day/Year | Effective Date: | January 14, 2010 Month/Day/Year |

Issued By:John R. Summers, General ManagerLake Region Water & Sewer Company
P.O. Box 9, Lake Ozark, MO 65049