*Exhibit No.:*
*Issue:* *Rate Design*
*Witness:* *Jarrod J. Robertson*
*Sponsoring Party:* *MoPSC Staff*
*Type of Exhibit:* *Direct Testimony*
*Case No.:* *WR-2016-0064*
*Date Testimony Prepared:* *April 15, 2016*

# MISSOURI PUBLIC SERVICE COMMISSION

## COMMISSION STAFF DIVISION

## WATER AND SEWER DEPARTMENT

# DIRECT TESTIMONY

## OF

## JARROD J. ROBERTSON

**Hillcrest Utility Operating Company, Inc.**

**CASE NO. WR-2016-0064**

*Jefferson City, Missouri*
*April 2016*

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**DIRECT TESTIMONY OF**

**JARROD J. ROBERTSON**

**HILLCREST UTILITY OPERATING COMPANY, INC.**

**CASE NO. WR-2016-0064**

**DIRECT TESTIMONY**

**OF**

**JARROD J. ROBERTSON**

**HILLCREST UTILITY OPERATING COMPANY, INC.**

**CASE NO. WR-2016-0064**

Q. Please state your name and business address.

A. Jarrod J. Robertson, P. O. Box 360, Jefferson City, Missouri 65102.

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

A. I am a Utility Policy Analyst I with the Missouri Public Service Commission (PSC or Commission).

**BACKGROUND OF WITNESS**

Q. Please describe your educational background.

A. I graduated from Columbia College, Columbia, Missouri, where I earned a Bachelor of Arts degree in Biology, May of 2004.

Q. Please describe your work background prior to working at the Commission.

A. Prior to starting at the Commission, in July of 2015, I worked as an Environmental Specialist at the Missouri Department of Natural Resources (DNR) for both the Hazardous and Solid Waste Management Programs, from October 2008 – July 2015. I worked for the University of Missouri, Columbia as a Research Specialist from 1998 – October 2008, in the Agronomy, Animal Science and Biochemistry Departments, respectively.

While at DNR, as Project Manager in both the Hazardous and Solid Waste Management Programs, I analyzed data related to the release/spill of gasoline/petroleum, such

as Light Non-Aqueous Phase Liquids (LNAPL) and Non-Aqueous Phase Liquids (NAPL), at Underground/Aboveground Storage Tanks and violations which occurred at Permitted Landfills and Infectious Waste Disposal, respectfully. The data analysis involved volatile and non-volatile chemical concentration(s), their toxic; carcinogenic; flammability and other health hazards and the subsequent "desired" remedial levels of said chemicals. While with the Hazardous Waste Management Program, I also performed qualitative data analysis of concentration vs time and/or distance and point by point analysis using both the Mann-Kendall and Linear Regression statistical methods.

While at the University of Missouri, I analyzed data as it relates to the genetic and biological study/manipulation of various organisms: maize (corn); bovine and bacteria. I worked on the "Maize Project," mapping the genetic structure of corn, using Simple Sequence Repeat (SSR) DNA Marker Technique; studied heat stress in bovine using microarray analysis; and I created mutagenic strains of bacteria by deletion of a single gene or an operon (a cluster of genes) combined with cloning sequence(s) and amplification by way of a Poly Chain Reaction (PCR) in the Agronomy, Animal Science and Biochemistry Departments, respectively.

Q. Please describe your duties while employed by the Commission.

A. As a Utility Policy Analyst I, my core duties revolve around being a Case Coordinator for Small Company Rate Cases filed with the Commission. These duties include, but are not limited to: setting up the case Activities Timeline; authoring Customer Notice(s); coordinating meetings and correspondence between Staff, Office of the Public Counsel ("OPC"), and the utilities; disseminating information between Staff,

OPC and the utilities; reviewing and if necessary, revising utilities' tariff(s), as well as performing rate design.

Q. Have you previously filed testimony before this Commission?

A. No, I have not previously filed testimony before this Commission.

## EXECUTIVE SUMMARY

Q. What is the purpose of your direct testimony?

A. The purpose of my direct testimony is to provide rate design alternatives to the Commission for consideration in determining the ultimate rates for Hillcrest Utility Operating Company, Inc. ("Hillcrest" or "Company").

## COMPANY OVERVIEW

Q. Please provide a brief history of Hillcrest.

A. Hillcrest is a water and sewer service utility that provides service to approximately 241 water and 240 sewer customers, which consist of single-family homes, apartments, and small commercial businesses in the Hillcrest Manor subdivision in Cape Girardeau County, just outside the city of Cape Girardeau. The water and sewer systems are believed to have been constructed in approximately 1974, and operated by Hillcrest Utilities Company. Hillcrest Utilities Company received its original Certificates of Convenience and Necessities in Case No. 17938 for water and No. 17937 for wastewater. In 2006, utility system assets were transferred from Hillcrest Utilities Company to Brandco Investments, LLC in Case No. WM-2007-0261. The Commission granted the Company's current owners a CCN for water and sewer service in the context of approving the sale of assets from Brandco in File No. WO-2014-0340 through an Order that became

effective on October 22, 2014. The current Commission-approved rates and charges have not been changed since 1989.

Q. Please briefly describe the water system.

A. As was mentioned in Staff's water and sewer memo filed in the Partial Disposition Agreement in this proceeding, the water system consists of a single well, a newly constructed 58,000 gallon ground storage tank, and two high-service pumps that pump from the tank to the distribution system, which is made up of predominately six-inch and some eight-inch PVC pipe. There are also several flush hydrants located throughout the system. Each customer is individually metered. Prior to acquisition by Hillcrest the system only had a 20,000 gallon storage tank, which was inadequate to meet a minimum one-day average use, as recommended by the Missouri Department of Natural Resources' (DNR) *Minimum Design Standards for Missouri Community Water Systems.*

As was documented in Staff's Recommendation in File No. WO-2014-0340, both the drinking water system and the sewer system were in critical need of repairs and upgrade, and were subject to an Abatement Order on Consent agreement with DNR. These upgrades were necessary not only to meet regulatory requirements, but were also critical to improving the operational efficiency and dependability of both systems.

Drinking water system upgrades made by the Company, include the following:

- Replaced the old 20,000 gallon storage tank with a new 58,000 gallon tank.
- Added permanent chlorination which required a chlorine room to be added to the well house.
- Replaced the roof on the well house.
- Rewired all of the electrical components and electric motor controls in the well house.
- Added a backup generator.

- Resealed the well head.
- Replaced the master meter at the well head.
- Constructed a security fence around the well house and storage tank.
- Added eight valves to the distribution system.
- Replaced some broken meters in the distribution system.
- Installed a supervisory control and data acquisition system *(SCADA)* for more efficient system operation.

Q. Please briefly describe the wastewater system.

A. The wastewater system consists of gravity sewers, one existing lift station within the collection system, and one new lift station that was constructed as a part of the treatment facility in conjunction with a new treatment component, called a bioreactor. The bioreactor is a piece of fairly new technology. It consists of two concrete in-ground tanks filled with small plastic balls called media. The media provide surface area for bacteria to attach and grow on. Bacteria are used to break down and treat the raw sewage, especially to break down ammonia, which is the Company's purpose for utilizing the bioreactor. Utilizing the bioreactor means more sewage can be treated faster in a smaller plant. The treatment facility is a modification of what was previously a four-cell lagoon. The prior owner, Brandco, was required by DNR to meet new limits for ammonia discharge by July 1, 2016. This drove the Company to upgrade the facility and treatment process immediately after acquisition. This involved a reconfiguration of the treatment process while still utilizing the original system.

Upgrades include:

- A new moving bed bioreactor to help remove ammonia.
- A new lift station to pump effluent to the bioreactor from an existing lagoon cell.
- Rerouting a portion of the sewer pipe to a new entry point at the treatment system.
- Adding a fence around the lagoons and bioreactor.
- Cleared brush and over growth from around the lagoons and adjacent area.
- Riprapped the eroding drainage ditch between the lagoons.
- Installed SCADA on the two lift stations and bioreactor.

**RATE DESIGN**

Q. What is the general purpose of rate design?

A. The general purpose of rate design is to set "rates" that are both fair and just for the customer, while still affording the company an opportunity to collect its Commission-approved revenue requirement.

Q. What is the purpose of Staff's rate design alternatives?

A. The purpose of Staff's rate design alternatives is to design rates that will be used to collect the appropriate levels of revenue from each customer class in order to cover the Company's cost of service while giving the Commission flexibility to address the proposed rate increase and ultimate impact on the ratepayers.

Q. What is Hillcrest's current rate design structure for its water system?

A. The water system's current rate design structure combines all customers into one rate class, charging them the same customer charge of $3.58 per month and the same commodity fee of $1.84 per 1,000 gallons used.

Q. What is Hillcrest's current rate design structure for its sewer system?

A. The sewer system's current rate design structure combines the residential and commercial customers into one class with a flat, monthly customer charge of $14.63. The apartments are separated into a separate class with a flat monthly customer charge of $11.70.

Q. Did Staff design a new rate structure for the water customers?

A. Yes.

Q. Why did Staff design a new rate structure for the water customers?

A. The current rate design structure for water customers accounts for only one class, "Residential." Yet, there is more than one distinct customer type/class on the system.

Q. What is the justification for Staff creating a new customer class in the water rates?

A. A new customer class, and therefore a separate customer charge, is appropriate for the customers residing in the apartments, due to the nature of the apartment complex and the reduction in costs associated with reading the apartment's meters. Furthermore, this will make the water system's rate structure consistent with the sewer system's rate structure.

Q. What are Staff's alternative rate design proposals for the implementation of new rates?

A. There are two alternatives that Staff is proposing to the Commission for the purposes of designing rates:

The first alternative is the traditional manner of rate design.

- The total revenue requirement for water is $177,171; an increase of $144,778 in revenue requirement. This will create an average monthly water bill, based on 5,300 gallons of usage, for the residential and

commercial customers, of $69.41, which is a total increase of 420.6%, and creates an average monthly water bill, based on 5,300 gallons of usage, for the proposed apartment customers, of $62.52, which is a total increase of 368.96%

- The total revenue requirement for sewer is $208,844; an increase of $167,413 in revenue requirement. This will create an average monthly sewer bill for the residential and commercial customers, of $73.75, which is a total increase of 404.07%, and an average monthly sewer bill for the proposed apartment customers, of $58.98, which is a total increase of 303.14%.

The second alternative is a phase-in proposal. The reason for considering a phase-in is to alleviate the amount of "rate shock" on the customer as a result of implementing the entire rate increase all at once.

Q. Please describe Staff's alternative phase-in proposal.

A. If the Commission decides to phase-in the increase, Staff recommends the Commission order the Company to file a rate case 12 months after the effective date of new rates in this proceeding. Staff further recommends the amount of revenue requirement (non-cash flow items) not calculated in the initial rate be "carried over" and included in the rates determined in the subsequent rate case. The amounts will include carrying costs and will be included in rate base and amortized over five years.

- By removing the non-cash flow items, the new revenue requirement for water is $132,699, which is less than the $177,171 in the traditional method. This is an increase of $100,306 in revenue requirement.

This will create an average monthly water bill, based on 5,300 gallons of usage, for the residential and commercial customers, of $50.19, which is a total increase of 276.49%, and an average monthly water bill for the proposed apartment customers, of $43.70, which is a total increase of 227.76%. The difference between the two revenue requirements is the amount that will be "carried-over" to the next rate case plus the carrying costs.

- By removing the non-cash flow items, the new total revenue requirement for sewer is $157,253, which is less than the $208,844 in the traditional method. This is an increase of $115,822 in revenue requirement. This will create a monthly sewer bill for the residential and commercial customers, of $55.53, which is a total increase of 279.55%, and an average monthly sewer bill for the proposed apartment customers, of $44.41, which is a total increase of 203.55%. The difference between the two revenue requirements is the amount that will be "carried-over" to the next rate case plus the carrying costs.

**TARIFF ISSUES**

Q. Has Hillcrest proposed various changes to its Tariffs?

A. Yes. Hillcrest has proposed various changes to its schedule of service charges.

Q. Is Staff in agreement with those proposed changes?

A. Staff agrees with a majority of the changes that have been proposed. However, there are three items for which Staff is waiting for justification of the proposed changes from

the Company. Staff will continue to work with the Company to hopefully resolve this issue prior to filing rebuttal testimony.

Q. Does this conclude your direct testimony?

A. Yes.

**BEFORE THE PUBLIC SERVICE COMMISSION**

**OF THE STATE OF MISSOURI**

| | | |
|---|---|---|
| In the Matter of the Water Rate Increase Request of Hillcrest Utility Operating Company, Inc. | ) ) ) | Case No. WR-2016-0064 |

**AFFIDAVIT OF JARROD ROBERTSON**

STATE OF MISSOURI )
) ss.
COUNTY OF COLE )

**COMES NOW** Jarrod Robertson 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.

Jarrod Robertson

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 15th day of April, 2016.

DIANNA L. VAUGHT
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: [illegible] 2019
Commission Number: 377

Dianna L. Vaught
Notary Public

**Jarrod J Robertson**

**Utility Policy Analyst**

**Present Position:**

I am a Utility Policy Analyst in the Water and Sewer Department, of the Commission Staff Division of the Missouri Public Service Commission. I have been employed by the Missouri Public Service Commission since, July 2015.

**Education and Employment Background:**

I graduated from Columbia College, Columbia, Missouri, where I earned a Bachelor of Arts degree in Biology, May of 2004. Prior to starting at the Commission, in July of 2015, I worked as an Environmental Specialist at the Missouri Department of Natural Resources (DNR) for both the Hazardous and Solid Waste Management Programs, from October 2008 – July 2015. I worked for the University of Missouri, Columbia as a Research Specialist from 1998 – October 2008, in the Agronomy, Animal Science and Biochemistry Departments, respectfully.

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While at the University of Missouri, I analyzed data as it related to the genetic and biological study/manipulation of various organisms: maize (corn); bovine and bacteria. I worked on the "Maize Project," mapping the genetic structure of corn, using Simple Sequence Repeat (SSR) DNA Marker Technique; studied heat stress in bovine using microarray analysis; and I created mutagenic strains of bacteria by deletion of a single gene or an operon (a cluster of genes) combined with cloning sequence(s) and amplification by way of a Poly Chain Reaction (PCR) in the Agronomy, Animal Science and Biochemistry Departments, respectfully.

**Case Participation:**

| Company Name | Case Number(s) | Testimony/Issues |
|---|---|---|
| Hillcrest Utility Operating Company, Inc. | WR-2015-0064<br>SR-2015-0065 | Water and Sewer Rate Increase Request |
| Cannon Home Association | SR-2016-0112 | Sewer Rate Increase Request |

# WATER & SEWER COMPANY

## Rate Making Income Statement-Water

## Phase In Alternative

### Operating Revenues at Current Rates

| | | | |
|---|---|---|---|
| 1 | Tariffed Rate Revenues * | $ | 32,378 |
| 2 | Other Operating Revenues * | $ | 15 |
| 3 | **Total Operating Revenues** | **$** | **32,393** |
| 4 | * See "Revenues - Current Rates" for Details | | |

### Cost of Service

| | Item | | Amount |
|---|---|---|---|
| 1 | Operators Salary-Maintenance | $ | 18,479 |
| 2 | Operator-Backup | $ | - |
| 3 | Electricity-Pumping | $ | 6,129 |
| 4 | | $ | - |
| 5 | Utility Water Usage | $ | - |
| 6 | Water Treatment Expense-Chemicals | $ | 1,797 |
| 7 | Bank Fees | $ | 2,421 |
| 8 | Outside Services Employed | $ | 927 |
| 9 | System Repairs Maintenance | $ | 1,037 |
| 10 | Billing & Collections | $ | 6,253 |
| 11 | Office Supplies | $ | 495 |
| 12 | Postage | $ | 168 |
| 13 | Administration & General - Salaries | $ | 24,153 |
| 14 | Office Utilities | $ | - |
| 15 | Telephone & Internet Expense | $ | 361 |
| 16 | Transportation Expense | $ | 1,598 |
| 17 | Fuel Expense-Vehicles | $ | - |
| 18 | Medical Expense | | |
| 19 | Property & Liability Insurance | $ | 11,827 |
| 20 | Rent Expense-Building | $ | 6,121 |
| 21 | Rate Case Expense | $ | - |
| 22 | MO DNR Fees | $ | 200 |
| 23 | Employee Pensions & Benefits | $ | 6,971 |
| 24 | Regulatory Commission Expense | $ | 735 |
| 25 | Uncollectable Accounts | $ | - |
| 26 | **Sub-Total Operating Expenses** | **$** | **89,672** |
| 27 | Property Taxes | $ | 164 |
| 28 | MO Franchise Taxes | $ | - |
| 29 | Employer FICA Taxes | $ | 2,104 |
| 30 | Federal Unemployment Taxes | | |
| 31 | State Unemployment Taxes | $ | 600 |
| 32 | State & Federal Income Taxes | $ | 4,315 |
| 33 | **Sub-Total Taxes** | **$** | **7,183** |
| 34 | Depreciation Expense | | |
| 35 | Interest Expense | $ | 35,844 |
| 36 | Amortization of Utility Plant | $ | - |
| 37 | **Sub-Total Depreciation/Interest/Amortization** | **$** | **35,844** |
| 38 | **Return on Rate Base** | **$** | **-** |
| 39 | **Total Cost of Service** | **$** | **132,699** |
| 40 | **Overall Revenue Increase Needed** | **$** | **100,306** |

# WATER & SEWER COMPANY

## Rate Making Income Statement-Sewer

## Phase In Alternative

### Operating Revenues at Current Rates

| | | | |
|---|---|---|---|
| 1 | Tariffed Rate Revenues * | $ | 41,431 |
| 2 | Other Operating Revenues * | $ | - |
| 3 | **Total Operating Revenues** | **$** | **41,431** |
| 4 | * See "Revenues - Current Rates" for Details | | |

### Cost of Service

| | Item | | Amount |
|---|---|---|---|
| 1 | Operators Salary | $ | - |
| 2 | Operator-Backup | $ | - |
| 3 | Electricity-Pumping | $ | 4,971 |
| 4 | Electricity-Shop | $ | - |
| 5 | Utility Water Usage | $ | - |
| 6 | Sewer Treatment -Chemicals | $ | 4,179 |
| 7 | Sewer Treatment -Testing/Laboratory Fees | $ | 23,088 |
| 8 | Sludge Removal | $ | - |
| 9 | Maintenance Expense-Parts/Equipment | $ | 11,687 |
| 10 | Maintenance Expense-Outside Labor | $ | 1,019 |
| 11 | Bank Fees | $ | 2,331 |
| 12 | Administration & General - Salaries | $ | 24,153 |
| 13 | Telephone & Internet Expense | $ | 323 |
| 14 | Transportation Expense | $ | 1,598 |
| 15 | Property & Liability Insurance | $ | 11,827 |
| 16 | Rent Expense | $ | 6,121 |
| 17 | Rate Case Expense | $ | - |
| 18 | Office Supplies | $ | 495 |
| 19 | Postage Expense | $ | 58 |
| 20 | Bookkeeping | $ | 6,229 |
| 21 | Employee Pensions & Benefits | $ | 9,075 |
| 22 | Regulatory Commission Expense | $ | 3,745 |
| | Uncollectable Accounts | $ | - |
| 23 | Miscellaneous General Expenses | $ | 38 |
| 24 | **Sub-Total Operating Expenses** | **$** | **110,937** |
| 25 | Property Taxes | $ | 164 |
| 26 | MO Franchise Taxes | $ | - |
| 27 | Employer FICA Taxes | $ | - |
| 28 | Federal Unemployment Taxes | $ | - |
| 29 | State Unemployment Taxes | $ | 600 |
| 30 | State & Federal Income Taxes | $ | 4,895 |
| 31 | **Sub-Total Taxes** | **$** | **5,659** |
| 32 | Depreciation Expense | $ | - |
| 33 | Interest Expense | $ | 40,657 |
| 34 | Amortization of Utility Plant | $ | - |
| 35 | **Sub-Total Depreciation/Interest/Amortization** | **$** | **40,657** |
| 36 | **Return on Rate Base** | **$** | **-** |
| 37 | **Total Cost of Service** | **$** | **157,253** |
| 38 | **Overall Revenue Increase Needed** | **$** | **115,822** |

# WATER & SEWER COMPANY

## Phase In Alternative Customer Bill Comparison-Water

**Rates for 5/8" Meter**

| Current Base Customer Charge | Proposed Base Customer Charge | Current Usage Rate | Proposed Usage Rate |
|---|---|---|---|
| $3.58 | $32.50 | $1.84 | $3.34 |

current service charge is monthly charge
usage rate is per 1,000 gallons used

**MONTHLY BILL COMPARISON**

5,300 gallons/month usage

| | | |
|---|---|---|
| **Current Rates** | | |
| Customer Charge | $ | 3.58 |
| Usage Charge | $ | 9.75 |
| Total Bill | $ | 13.33 |
| **Proposed Rates** | | |
| Customer Charge | $ | 32.50 |
| Usage Charge | $ | 17.70 |
| Total Bill | $ | 50.19 |

| INCREASES | |
|---|---|
| **Customer Charge** | |
| $ Increase | $28.92 |
| % Increase | 807.72% |
| **Usage Charge** | |
| $ Increase | $7.95 |
| % Increase | 81.48% |
| **Total Bill** | |
| $ Increase | $36.86 |
| % Increase | 276.49% |

# WATER & SEWER COMPANY

## Phase In Alternative Customer Bill Comparison-Sewer

**Rates for Residential Customer**

| Current Base Customer Charge | Proposed Base Customer Charge |
|---|---|
| $14.63 | $55.53 |

current service charge is monthly charge

**MONTHLY BILL COMPARISON**

| | |
|---|---|
| **Current Rates** | |
| Customer Charge | $ 14.63 |
| Usage Charge | $ - |
| Total Bill | $ 14.63 |
| **Proposed Rates** | |
| Customer Charge | $ 55.53 |
| Usage Charge | $ - |
| Total Bill | $ 55.53 |
| **INCREASES** | |
| **Customer Charge** | |
| $ Increase | $40.90 |
| % Increase | 279.55% |
| **Usage Charge** | |
| $ Increase | $0.00 |
| % Increase | N/A |
| **Total Bill** | |
| $ Increase | $40.90 |
| % Increase | 279.55% |

# WATER & SEWER COMPANY

## Customer Bill Comparison-Water

**Rates for 5/8" Meter**

| Current Base Customer Charge | Proposed Base Customer Charge | Current Usage Rate | Proposed Usage Rate |
|---|---|---|---|
| $3.58 | $34.44 | $1.84 | $6.60 |

current service charge is monthly charge
usage rate is per 1,000 gallons used

**MONTHLY BILL COMPARISON**

5,300 gallons/month usage

| | | |
|---|---|---|
| **Current Rates** | | |
| Customer Charge | $ | 3.58 |
| Usage Charge | $ | 9.75 |
| Total Bill | $ | 13.33 |
| **Proposed Rates** | | |
| Customer Charge | $ | 34.44 |
| Usage Charge | $ | 34.97 |
| Total Bill | $ | 69.41 |

**INCREASES**

| | |
|---|---|
| **Customer Charge** | |
| **$ Increase** | **$30.86** |
| **% Increase** | **861.88%** |
| **Usage Charge** | |
| **$ Increase** | **$25.22** |
| **% Increase** | **258.60%** |
| **Total Bill** | |
| **$ Increase** | **$56.07** |
| **% Increase** | **420.60%** |

# WATER & SEWER COMPANY

## Rate Making Income Statement-Sewer

| | Operating Revenues at Current Rates | | |
|---|---|---|---|
| 1 | Tariffed Rate Revenues * | $ | 41,431 |
| 2 | Other Operating Revenues * | $ | - |
| 3 | **Total Operating Revenues** | **$** | **41,431** |
| 4 | * See "Revenues - Current Rates" for Details | | |

| | Cost of Service | | |
|---|---|---|---|
| | Item | | Amount |
| 1 | Operators Salary | $ | - |
| 2 | Operator-Backup | $ | - |
| 3 | Electricity-Pumping | $ | 4,971 |
| 4 | Electricity-Shop | $ | - |
| 5 | Utility Water Usage | $ | - |
| 6 | Sewer Treatment -Chemicals | $ | 4,179 |
| 7 | Sewer Treatment -Testing/Laboratory Fees | $ | 23,088 |
| 8 | Sludge Removal | $ | - |
| 9 | Maintenance Expense-Parts/Equipment | $ | 11,687 |
| 10 | Maintenance Expense-Outside Labor | $ | 1,019 |
| 11 | Bank Fees | $ | 2,331 |
| 12 | Administration & General - Salaries | $ | 24,153 |
| 13 | Telephone & Internet Expense | $ | 323 |
| 14 | Transportation Expense | $ | 1,598 |
| 15 | Property & Liability Insurance | $ | 11,827 |
| 16 | Rent Expense | $ | 6,121 |
| 17 | Rate Case Expense | $ | - |
| 18 | Office Supplies | $ | 495 |
| 19 | Postage Expense | $ | 58 |
| 20 | Bookkeeping | $ | 6,229 |
| 21 | Employee Pensions & Benefits | $ | 9,075 |
| 22 | Regulatory Commission Expense | $ | 3,745 |
| | Uncollectable Accounts | $ | 467 |
| 23 | Miscellaneous General Expenses | $ | 38 |
| 24 | **Sub-Total Operating Expenses** | **$** | **111,404** |
| 25 | Property Taxes | $ | 164 |
| 26 | MO Franchise Taxes | $ | - |
| 27 | Employer FICA Taxes | $ | - |
| 28 | Federal Unemployment Taxes | $ | - |
| 29 | State Unemployment Taxes | $ | 600 |
| 30 | State & Federal Income Taxes | $ | 4,895 |
| 31 | **Sub-Total Taxes** | **$** | **5,659** |
| 32 | Depreciation Expense | $ | 31,467 |
| 33 | Interest Expense | $ | 40,657 |
| 34 | Amortization of Utility Plant | $ | - |
| 35 | **Sub-Total Depreciation/Interest/Amortization** | **$** | **72,124** |
| 36 | **Return on Rate Base** | **$** | **19,657** |
| 37 | **Total Cost of Service** | **$** | **208,844** |
| 38 | **Overall Revenue Increase Needed** | **$** | **167,413** |

# WATER & SEWER COMPANY

## Rate Making Income Statement-Water

| | Operating Revenues at Current Rates | | |
|---|---|---|---|
| 1 | Tariffed Rate Revenues * | $ | 32,378 |
| 2 | Other Operating Revenues * | $ | 15 |
| 3 | **Total Operating Revenues** | **$** | **32,393** |
| 4 | * See "Revenues - Current Rates" for Details | | |

| | Cost of Service | | |
|---|---|---|---|
| | **Item** | | **Amount** |
| 1 | Operators Salary-Maintenance | $ | 18,479 |
| 2 | Operator-Backup | $ | - |
| 3 | Electricity-Pumping | $ | 6,129 |
| 4 | | $ | - |
| 5 | Utility Water Usage | $ | - |
| 6 | Water Treatment Expense-Chemicals | $ | 1,797 |
| 7 | Bank Fees | $ | 2,421 |
| 8 | Outside Services Employed | $ | 927 |
| 9 | System Repairs Maintenance | $ | 1,037 |
| 10 | Billing & Collections | $ | 6,253 |
| 11 | Office Supplies | $ | 495 |
| 12 | Postage | $ | 168 |
| 13 | Administration & General - Salaries | $ | 24,153 |
| 14 | Office Utilities | $ | - |
| 15 | Telephone & Internet Expense | $ | 361 |
| 16 | Transportation Expense | $ | 1,598 |
| 17 | Fuel Expense-Vehicles | $ | - |
| 18 | Medical Expense | | |
| 19 | Property & Liability Insurance | $ | 11,827 |
| 20 | Rent Expense-Building | $ | 6,121 |
| 21 | Rate Case Expense | $ | - |
| 22 | MO DNR Fees | $ | 200 |
| 23 | Employee Pensions & Benefits | $ | 6,971 |
| 24 | Regulatory Commission Expense | $ | 735 |
| 25 | Uncollectable Accounts | $ | 467 |
| 26 | **Sub-Total Operating Expenses** | **$** | **90,139** |
| 27 | Property Taxes | $ | 164 |
| 28 | MO Franchise Taxes | $ | - |
| 29 | Employer FICA Taxes | $ | 2,104 |
| 30 | Federal Unemployment Taxes | | |
| 31 | State Unemployment Taxes | $ | 600 |
| 32 | State & Federal Income Taxes | $ | 4,315 |
| 33 | **Sub-Total Taxes** | **$** | **7,183** |
| 34 | Depreciation Expense | $ | 26,675 |
| 35 | Interest Expense | $ | 35,844 |
| 36 | Amortization of Utility Plant | $ | - |
| 37 | **Sub-Total Depreciation/Interest/Amortization** | **$** | **62,519** |
| 38 | **Return on Rate Base** | **$** | **17,330** |
| 39 | **Total Cost of Service** | **$** | **177,171** |
| 40 | **Overall Revenue Increase Needed** | **$** | **144,778** |

# WATER & SEWER COMPANY

## Customer Bill Comparison-Sewer

**Rates for Residential Customer**

| Current Base Customer Charge | Proposed Base Customer Charge |
|---|---|
| $14.63 | $73.75 |

current service charge is monthly charge

**MONTHLY BILL COMPARISON**

| | |
|---|---|
| **Current Rates** | |
| Customer Charge | $ 14.63 |
| Usage Charge | $ - |
| Total Bill | $ 14.63 |
| **Proposed Rates** | |
| Customer Charge | $ 73.75 |
| Usage Charge | $ - |
| Total Bill | $ 73.75 |
| **INCREASES** | |
| **Customer Charge** | |
| $ Increase | $59.12 |
| % Increase | 404.07% |
| **Usage Charge** | |
| $ Increase | $0.00 |
| % Increase | N/A |
| **Total Bill** | |
| $ Increase | $59.12 |
| % Increase | 404.07% |