COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF BUTLER COUNTY WATER SYSTEM, INC. FOR A RATE ADJUSTMENT PURSUANT TO 807 KAR 5:076

Case. No. 2024-00061

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RESPONSE OF BUTLER COUNTY WATER SYSTEM, INC. TO THE COMMMISSION STAFF'S SECOND REQUEST FOR INFORMATION DATED MAY 20, 2024

Witness: Jeff Peeples

- 1. Refer to Butler County Water's response to Commission Staff's First Request for Information (Staff's First Request), Item 15a, Attachment 15_a_Nonrecuring_charges_cost_justifications.pdf. Reconcile and explain the difference between the total proposed non-recurring charge and the tariff amount for each of the following charges:
 - a. Returned Check Fee;

Response: See File: 1.a_Returned_Check_Fee

b. Delinquent Service Fee;

Response: See File: 1.b_Delinquent_Service_Fee

c. Meter Reading Recheck Fee;

Response: See File: 1.c_Meter_Reading_Recheck_Fee

d. Service Connection Fee;

Response: See File: 1.d_Service_Connection_Fee

e. Service Connection- After Hours Fee;

Response: See File: 1.e_Service_Connection-After_Hours_Fee

f. Service Investigation Fee;

Response: See File: 1.f_Service_Investigation_Fee

g. Service Investigation After Hours Fee;

Response: See File: 1.g_Service_Investigation_After_Hours_Fee

h. Service Line Inspection Fee;

Response: See File: 1.h_Service_Line_Inspection_Fee

i. Meter Test Request Fee;

Response: See File: 1.i_Meter_Test_Request_Fee

j. Meter Investigation Fee.

Response: See File: 1.j_Meter_Investigation_Fee

Witness: Jeff Peeples

2. Refer to Butler County Water's response to Staff's First Request, Item 8, Attachment, 8_Minutes_2024.pdf. Explain what Butler County Water's plans are for line extensions. Explain what types of funding Butler County Water is currently seeking for this project and any funding approved. Provide any documentation related to approvals for funding.

Response: Butler County Water is committed to expanding its water infrastructure to meet the growing needs of our community. Our line extension plans focus on improving access to reliable and clean water for both existing and new customers in underserved areas. The key objectives of our line extension plans include:

- 1. <u>Extending Water Lines to Underserved Areas</u>: We are targeting regions within Butler County that currently have limited or no access to the county's water supply.
- 2. <u>Upgrading Aging Infrastructure</u>: Alongside extending lines, we are also upgrading aging infrastructure to ensure the sustainability and efficiency of our water supply system.
- 3. <u>Enhancing Service Reliability</u>: By extending and upgrading our water lines, we aim to reduce service interruptions and improve water pressure across the network.

Funding for Line Extension Projects: To support these projects, Butler County Water is actively seeking and has secured various types of funding:

- 1. <u>Federal and State Grants</u>: These grants are critical in covering a significant portion of the project costs.
- 2. <u>Loans</u>: We are also pursuing low-interest loans from government programs such as the USDA Rural Development Water and Environmental Programs, which offer financial assistance specifically designed for rural water infrastructure projects.
- 3. <u>Butler County Fiscal Court Support</u>: Collaborations with Butler County Fiscal Court will enable BCWS to receive additional financial backing if necessary.

Funding Mechanisms that may be Utilized: Butler County Water will utilize the following approvals for funding if necessary:

- <u>USDA Rural Development Loan</u>: This funding will be utilized primarily for the extension of water lines to rural areas that lack adequate water supply.
- <u>Kentucky Infrastructure Authority Loan</u>: These funds will be directed towards both extending and upgrading our water lines to improve service delivery.
- <u>State Revolving Fund (SRF) Loan</u>: These loans will help in financing the installation of new water lines and the replacement of outdated infrastructure.

Based on our findings, we have identified a replacement plan to reduce water loss in the identified areas and the funding mechanism to replace:

- Kentucky Infrastructure Authority Cleaner Water Program Grant (WRIS Project Number WX21031025)
 - a. 21CWW297
 - i. Allocated grant funding: \$350,962
 - ii. BCWS contribution from depreciation reserves: \$384,000
 - 1. Identified Roads for Line Replacement with high amounts of main breaks, leading to elevated water loss.
 - a. KY 70 (Rochester Road)
 - b. KY 79 South (Russellville Road)
 - c. KY 106 (Huntsville Quality Road)
 - d. Carson Bridge Road
 - e. US 231 (S. Main Street)

Funding Documentation See File: 2_Documentation_Funding_Approvals

Witness: Jeff Peeples

3. Provide the monthly unaccounted for water loss calculations for calendar years 2023 and 2024.

Response: See Files:	3_2023_Monthly_WaterLoss_Reports
	2_2024_Monthly_water_Loss_Reports

Witness: Jeff Peeples

- 4. Refer to Application, Exhibit 4, 4_SAO_With_Attachments.pdf, Reference G.
 - a. Explain what steps Butler County Water plans to take to reduce water loss from the reported 21.758 percent to no more than 15 percent.

Response:

Plan to Reduce Water Loss

Based on our findings, we have developed a multifaceted plan to reduce water loss in the identified areas:

1. Leak Repair and Infrastructure Upgrades:

- **Immediate Repairs:** Prioritize and repair identified leaks promptly to minimize water loss.
- **Pipeline Replacement:** Replace aging and corroded pipes, especially in areas with recurrent leak issues. Water lines identified for replacement are listed in response to question 2.
- Valve Replacement: Upgrade old and malfunctioning valves to ensure proper control over water flow.

2. Enhanced Monitoring and Maintenance:

- **Regular Inspections:** Increase the frequency of manual inspections and maintenance checks in high-risk areas.
- **Real-Time Monitoring:** Expand the use of SCADA and DMA systems for continuous, real-time monitoring to quickly identify and address new leaks.

3. Water Pressure Management:

- **Pressure Reducing Valves (PRVs):** Install PRVs in areas with high water pressure to reduce stress on pipes and lower the incidence of leaks.
- **Pressure Management:** Continuously monitor and adjust pressure settings to maintain optimal levels across the distribution network.

4. **Community Engagement and Public Awareness:**

• Education Campaigns: Launch public awareness campaigns to educate consumers on the importance of water conservation and encourage reporting of leaks.

5. Advanced Leak Detection Technologies:

- **Smart Sensors:** Invest in more advanced leak detection technologies such as smart water meters that provide real-time data to both the utility and consumers.
- **Remote Sensing:** Utilize satellite and drone technology for aerial surveys and thermal imaging to detect leaks in hard-to-reach areas.

6. Data Analysis and Continuous Improvement:

- **Data Analytics:** Employ advanced data analytics to analyze trends and predict potential leak locations.
- Feedback Loop: Establish a continuous improvement feedback loop where data from repairs and interventions are used to refine and improve our leak detection and prevention strategies.

7. Water Accountability Personnel:

Execution: As part of the water loss reduction plan, we want to highlight the collaborative efforts facilitated by our Joint Operations Agreement with the Warren County Water District. This partnership provides BCWS with access to a dedicated team of six highly trained water accountability professionals. These experts specialize in leak detection, meter testing, and the implementation of comprehensive water accountability programs. The team employs state-of-the-art technologies, including ground-sensing microphones, correlators, portable ultrasonic metering devices, and a network of acoustical loggers. Utilizing these advanced tools, the team conducts daily reviews of District Metered Area (DMA) data collected from the Supervisory Control and Data Acquisition (SCADA) system. By analyzing data for anomalies over the previous 24-hour period, they can promptly identify and address potential issues. Personnel are then strategically deployed to investigate and resolve any detected ensuring efficient and effective water irregularities. loss management.

b. Explain what areas Butler County Water has identified in contributing to its water loss.

Response:

Identification of Water Loss Areas

Through the implementation of various advanced technologies and traditional methods, we have identified several key areas where water loss

is prevalent. Our approach has included the following procedures:

- 1. Supervisory Control and Data Acquisition (SCADA) Systems:
 - **Implementation:** Our SCADA system continuously monitors water flow and pressure throughout the distribution network.
 - **Findings:** Data anomalies such as unexpected drops in pressure or unusual flow patterns have pinpointed potential leak locations and inefficiencies in the system.

2. District Metering Areas (DMA):

- **Implementation:** We have subdivided our service area into 17 distinct DMAs, each monitored by precise flow meters.
- Findings: Comparative analysis of water input versus consumption in these zones has highlighted areas with significant discrepancies, indicating potential leaks or unaccounted-for water usage. These DMA's are: South Hill (KY 70); Bowling Green Rd #3 and 79 South (KY 79 South & Russellville Road); Hickory Camp (Huntsville Quality Road); Bowling Green Rd #2 (Carson Bridge Road); and Treatment Plant (US 231). See list of line replacements in these areas in response to question 2.

3. Flow Meters:

- **Implementation:** High-accuracy flow meters have been installed at strategic points within the distribution network.
- **Findings:** These meters provide granular data on flow rates, helping to identify both minor and major leaks in real-time.

4. Leak Sensors:

- **Implementation:** Acoustic leak detection sensors have been deployed across various parts of the network.
- **Findings:** These sensors detect sound waves generated by leaks, allowing us to locate even the smallest of leaks with high precision.

5. Traditional Leak Detection Methods:

- **Implementation:** Manual inspections and acoustic listening devices are used periodically to check for leaks in pipes and fittings.
- **Findings:** These methods, although labor-intensive, have been effective in identifying leaks that are not detectable by automated systems.

Witness: Jeff Peeples

5. Refer to 807 KAR 5:076 Section 5(1)(a). State whether Butler County Water posted, at its place of business, a copy of the notice no later than the date the application was submitted to the Commission. If not, explain why not.

Response: Yes, a copy of the public notice was posted at the Butler County Office and Warren County Office on March 12, 2024. The application was submitted to the Commission on March 14, 2024.

Witness: Jeff Peeples

6. Refer to 807 KAR 5:076 Section (5)(1)(b)(1) and (2). State whether Butler County Water, within five business days of the date of the application was submitted to the Commission, posted on its website a copy of the public notice and a hyperlink to the location on the Commission's website where the case documents are available. If yes, submit any proof of notice on the website with instructions on where to locate said publication. If not, explain why not.

Response: Yes, Butler County Water posted the public notice on its website within five business days of the application date. The notice was posted to the website on March 12th and the application was submitted to the Commission on March 14th. The notice can be located at:

https://www.butlerwater.com/wp-content/uploads/2024/03/Customer-Notice-2-Year-Butler-System-03-07-2024.pdf

The public notice contains instructions to the Commission's website, address, telephone number, and instructions on comments and written request for intervention.

An excerpt from the System's website is below:





NEWS

BUTLER WATER CELEBRATES DRINKING WATER WEEK Butler Water will join water utilities across the country to celebrate Drinking Water Week (May 5-10 by recognizing the vital role tap water plays in daily life... READ MORE

REINFORCING HEALTHY HABITS The Wash Your Hands campaign, launches in-conjunction with Global Handwashing Day on October 15, to reinforce healthy

→ NEWS ARCHIVE

WATER QUALITY REPORT PUBLIC NOTICE: ALTERNATIVE RATE FILING – PUBLIC SERVICE COMMISSION

Witness: Jeff Peeples

7. Refer to 807 KAR 5:076 Section (5)(3). Provide the tear sheets showing the legal notice advertisement and any other documentation reflecting notice.

Response: See Files: 7_Affidavit 7_Tear_Sheet

Witness: Jeff Peeples

8. Provide a copy of the most recent invoice for Medical and Dental insurance Warren County Water District provides to employees.

Response: See File: 8_Medical_and_Dental_Invoice

Witness: Jeff Peeples

9. Refer to Butler County Water's response to Staff's First Request, Item 6a, Cell H17. Explain the reason \$885 has been added to the regular salaries amount for only this employee.

Response: The \$885 added to Cell H17 is additional compensation paid to the Construction Coordinator for the supplemental position of Safety Coordinator. In year 2024, the employee's supplemental compensation for the Safety Coordinator will be \$9,216.48 and Butler County Water's allocation of the total is 9.6%, or \$884.78

Witness: Jeff Peeples

 Refer to Butler County Water's response to Staff's First Request, Item 5, 5_Butler_County_Rate_Model.xlsx, Pension & Benefit Tab, Row 68. Provide a breakdown and explanation of all post-employment benefits (OPEB) Butler County Water provides employees.

Response: Warren County Water District administers an Other Postemployment Benefits (OPEB) plan providing medical and dental benefits to retired District employees and their spouse under certain conditions.

Individuals who are employed by the District and are eligible to participate in the group health plan are eligible to continue healthcare benefits upon retirement after reaching age 60 and meeting a combined age plus years of service of at least 75. The Water District will pay up to 70 percent of the premium for employee and spouse coverage for a period not to exceed 5 years. Retired employees are ineligible under the plan at age 65 or when they qualify for coverage under Medicare or other agency.

Currently six retired employees participate in the OPEB plan and Butler Water's portion of the cost is allocated through the employee overhead rate.

Witness: Jeff Peeples

11. Refer to Butler County Water's Current Tariff and Butler County Water's Staff's First Request, Item 15. Attachment response to 15 Nonrecurring Charges. Confirm whether the Delinguent Service to Reconnect and Delinquent Service to Reconnect After Hours charges are components of the Delinquent Service charge. If so, explain why Butler County Water separated the charges. If not, explain why they are listed as separate nonrecurring charges considering they are not listed in Butler County Water's current tariff.

Response: Yes, the Delinquent Service to Reconnect and Delinquent Service to Reconnect After Hours are components of the Delinquent Service charge. These fees are associated with our collection process. The tariff states that the "Delinquent Service Charge is a charge of \$25 made for a trip to collect a delinquent account or terminate service". This fee is referred to Fee-Collection Trip in our billing system for a trip to collect a delinquent account or terminate service during regular business hours.

"Where a customer's service has been discontinued for nonpayment of bills and the delinquent customer has paid his or her outstanding bills for service and requested reconnection, the Water System shall assess a service connection charge in addition to a delinquent service charge to re-establish water service". The tariff states that the "Service Connection Charge is a charge of \$25 made for all service reconnections made during regular working hours, except that there shall be no connection charge made for service on the original installation of facilities. If service is reconnected other than during regular working hours, the charge shall be \$65". For purposes of tracking and reporting, we have named Fee-Reconnection Trip (\$25) and Fee-Reconnection Trip-After Hours (\$65) to use for reconnections in our collection process.

Witness: Jeff Peeples

12. Refer to Butler County Water's response Commission Staff's First Request for Information, Item 20. Confirm if Butler County Water's disposal of failed meters is a recurring event expected to recur annually or an unusual occurrence.

Response: Disposition of these meters are part of typical operations and maintenance of the water system and are expected to recur annually. Meters are removed from service for various reasons, including the following: accuracy failure; damage due to cold weather conditions, such as freezing temperatures; incidental damage caused by the customer; and intentional damage caused by the customer, such as tampering. Some meters can be repaired, tested, and returned to service. Disposition in these situations occur when the meter cannot be repaired.