**COMMONWEALTH OF KENTUCKY**

**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

| | | |
|---|---|---|
| **ELECTRONIC APPLICATION OF WARREN COUNTY WATER DISTRICT FOR AN ADJUSTMENT OF RATES FOR WATER SERVICE** | **) ) ) )** | **CASE NO. 2024-00200** |

# RESPONSE OF

# WARREN COUNTY WATER DISTRICT

# TO

# COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION

# DATED AUGUST 30, 2024

**Filed: September 13, 2024**

**COMMONWEALTH OF KENTUCKY**

**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

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| **ELECTRONIC APPLICATION OF WARREN COUNTY WATER DISTRICT FOR AN ADJUSTMENT OF RATES FOR WATER SERVICE** | **)** **)** **)** **)** | **CASE NO. 2024-00200** |

# RESPONSE OF WARREN COUNTY WATER DISTRICT TO COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION

Warren County Water District (the "District") submits its Response to Commission Staff's Second Request for Information.

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*Counsel for Warren County Water District*

## CERTIFICATE OF SERVICE

In accordance with 807 KAR 5:001, Section 8, and the Public Service Commission's Order of July 22, 2021 in Case No. 2020-00085, I certify that this document was transmitted to the Public Service Commission on September 13, 2024 and that there are currently no parties that the Public Service Commission has excused from participation by electronic means in this proceeding

Damon R. Talley

*Counsel for Warren County Water District*

**COMMONWEALTH OF KENTUCKY**

**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

| | | |
|---|---|---|
| **ELECTRONIC APPLICATION OF WARREN COUNTY WATER DISTRICT FOR AN ADJUSTMENT OF RATES FOR WATER SERVICE** | ) ) ) ) | **CASE NO. 2024-00200** |

**CERTIFICATION OF RESPONSE OF WARREN COUNTY WATER DISTRICT TO COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION**

This is to certify that I have supervised the preparation of Warren County Water District's Response to Commission Staff's Second Request for Information as required by 807 KAR 5:001, Section 4(12)(d)(2)(b). The Response submitted on behalf of Warren County Water District is true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

Date: September 12, 2024

Jacob Cuarta, General Manager
Warren County Water District

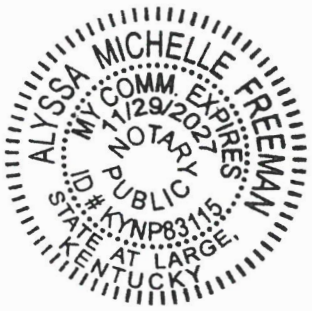
## SWORN CERTIFICATION AND VERIFICATION

**COMMONWEALTH OF KENTUCKY )**
**) SS:**
**COUNTY OF WARREN )**

The undersigned, Jacob Cuarta, being duly sworn, deposes and states that he, as General Manager for Warren County Water District, has personal knowledge of the matters set forth in the responses for which he is identified as the witness in Kentucky Public Service Commission Case No. 2024-00200, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Jacob Cuarta
General Manager
Warren County Water District

Subscribed, sworn to, and acknowledged before me, a Notary Public in and for said county and state, this 12 day of September 2024.




Alyssa Freeman
Notary Public

My Commission Expires: 11/29/2027

Notary ID: KYNP83115

## SWORN CERTIFICATION AND VERIFICATION

**COMMONWEALTH OF KENTUCKY )**
**) SS:**
**COUNTY OF WARREN )**

The undersigned, Jeff Peeples, being duly sworn, deposes and states that he, as Manager of Finance and Administration for Warren County Water District, has personal knowledge of the matters set forth in the responses for which he is identified as the witness in Kentucky Public Service Commission Case No. 2024-00200, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Jeff Peeples
Manager of Finance and Administration
Warren County Water District

Subscribed, sworn to, and acknowledged before me, a Notary Public in and for said county and state, this 12 day of September 2024.




Alyssa Freeman
Notary Public

My Commission Expires: 11/29/2027

Notary ID: KYNP83115

## SWORN CERTIFICATION AND VERIFICATION

**COMMONWEALTH OF KENTUCKY )**
**) SS:**
**COUNTY OF FAYETTE )**

The undersigned, Ross Guffey, being duly sworn, deposes and states that he, as a licensed professional engineer with HDR Engineering, Inc., has personal knowledge of the matters set forth in the responses for which he is identified as the witness in Kentucky Public Service Commission Case No. 2024-00200, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Ross Guffey, P.E.
Water/Wastewater Manager
HDR Engineering, Inc.

Subscribed, sworn to, and acknowledged before me, a Notary Public in and for said county and state, this 12 day of September 2024.

Notary Public

My Commission Expires: 6/20/2028

Notary ID: KYNP89582

**WARREN COUNTY WATER DISTRICT**

**Case No. 2024-00200**
**Response to Commission Staff's Second Request for Information**

**Question No. 2-1**

**Responding Witness: Jacob Cuarta, General Manager**

**Q 2-1. Refer to the Application, Exhibit 4, at unnumbered page 36.**

**a. Explain why Warren District is proposing to remove purchased water rates from the tariff sheets and why such a change is reasonable.**

**b. Provide the date that Warren District stopped purchasing water from Bowling Green Municipal Utilities and why.**

A 2-1.

2-1a. On advice of counsel, Warren District does not believe it is necessary to include in its tariff the wholesale rates charged by its water supplier Bowling Green Municipal Utilities ("BGMU"). These wholesale rates have been approved by the Commission and are set forth in BGMU's tariff sheets, which are on file with the Commission. As explained by Warren District's counsel, Warren District should never have included the rates charged by BGMU in Warren District's tariff. These are **not rates charged** by Warren District, but are rates which Warren District **must pay** to another

utility. Warren District does not have a tariff sheet for what it pays its electric supplier nor its gas supplier nor any other utility provider. Thus, there is no need for Warren District to have a tariff sheet setting forth the wholesale rates charged by BGMU.

Historically, Warren District has had to file a revised tariff sheet each time that BGMU increased its wholesale rates to Warren District to reflect the new rates charged by BGMU. By deleting the BGMU wholesale rates from Warren District's tariff sheets, it will no longer need to prepare and file a revised tariff sheet each time that BGMU increases its wholesale rates.

2-1b. Warren District has **not** stopped purchasing water from BGMU and has no plans to cease purchasing water from BGMU. BGMU has been, and continues to be, Warren District's sole supplier of water. Warren District does not have a water treatment plant nor an alternative supplier of potable water. Thus, it relies upon BGMU for all its water. Furthermore, Warren District has a long-term contract with BGMU and is contractually obligated to purchase its water from BGMU.

# WARREN COUNTY WATER DISTRICT

## Case No. 2024-00200
## Response to Commission Staff's Second Request for Information

## Question No. 2-2

**Responding Witness: Ross Guffey, P.E., HDR Engineering, Inc.**

**Q 2-2.** **Refer to the Application, Exhibit 8, Schedule of Adjusted Operations, Revenue Requirements, and References – Water. Provide all workpapers used to generate the proposed adjustments, provide in Excel spreadsheet format with all formulas, rows, and columns fully accessible and unprotected.**

A 2-2. The workpapers used to generate the District's proposed adjustments as stated in its Schedule of Adjusted Operations are filed separately as Exhibits. The workpapers consist of two Excel spreadsheets: **Exhibit 2-2_COSS** and **Exhibit 2-2_Known and Measurables**. For **Exhibit 2-2_COSS**, please see the final tab of the Excel spreadsheet labeled "SAO."

**WARREN COUNTY WATER DISTRICT**

**Case No. 2024-00200**
**Response to Commission Staff's Second Request for Information**

**Question No. 2-3**

**Responding Witness: Jeff Peeples, Manager of Finance and Administration**

**Q 2-3. Refer to Application Statement of Adjusted Operations. Provide a cross reference that matches each 2023 general ledger account to each revenue and expense line in the Schedule of Adjusted Operations and reconcile each amount that does not match.**

A 2-3. See **Attachment 2-3** for a document providing cross references between each 2023 general ledger account and each revenue and expense line in the Schedule of Adjusted Operations. Because each amount matches, the District did not need to reconcile any accounts.

# Attachment 2-3

## Cross References Between General Ledger and Schedule of Adjusted Operations

**WARREN COUNTY WATER DISTRICT - WATER DIVISION**

SAO Cross Reference to General Ledger Accounts

| STATEMENT OF ADJUSTED OPERATIONS | | GENERAL LEDGER | | |
|---|---|---|---|---|
| Description | Test Year | Account | Description | Amount |
| | | 461-0001-2 | Metered Revenue-Residential | 10,121,995 |
| | | 461-0002-2 | Metered Revenue-Commercial | 2,805,185 |
| | | 461-0003-2 | Metered Revenue-Industrial | 2,971,463 |
| | | 461-0033-2 | Metered Revenue-Agricultural | 20,811 |
| | | 466-0000-2 | Metered Revenue - Resale (BGMU) | 1,981 |
| Metered Revenue | 15,921,435.00 | | | 15,921,435.00 |
| Fire Protection | 161,466 | 462-0000-2 | Metered Revenue-Fire Protect | 161,466 |
| Forfeited Discounts | 207,919 | 470-0000-2 | Fortified Discounts | 207,919 |
| | | 419-0000-2 | Interest Income-Sinking/Misc | 54,565 |
| | | 419-0003-2 | Interest Income-Depreciation Reserve (Mont I | (102) |
| | | 419-0007-2 | Interest Income-CD's (Franklin Series 2022D) | 48,048 |
| | | 419-0008-2 | Interest Income-Depreciation Reserve Fund | 156,561 |
| Interest Income | 259,072 | | | 259,072 |
| Misc. Service Revenues | 267,538 | 471-0000-2 | Misc Service Revenue | 267,538 |
| | | 474-0000-2 | Other Water Revenue - Miscellaneous | 600 |
| | | 472-0000-2 | Rental/Lease Revenue-District Property | 136,825 |
| | | 421-0002-2 | Non-Utility Income-Storm Water Agency | 70,540 |
| | | 414-0000-2 | Disposition - Gains / (Losses) | 32,445 |
| Other Water Revenues | 240,410 | | | 240,410 |
| | | 601-1001-2 | Wages - Source (Oper) | (0.24) |
| | | 601-5001-2 | Wages- T&D (Oper) | 399,953 |
| | | 601-6002-2 | Wages- T&D (Maint) | 351,392 |
| | | 601-7001-2 | Wages - Customer Acct | 528,041 |
| | | 601-8001-2 | Wages - Admin & Genl | 482,363 |
| Salaries and Wages- Employees | 1,761,749 | | | 1,761,749 |
| Comissioner Fees | 15,000 | 675-8011-2 | Misc Expense- Commissioner Fee | 15,000 |
| | | 604-1001-2 | Employee Overhead - Source (Oper) | (0.13) |
| | | 604-5001-2 | Employee Overhead - T&D (Oper) | 225,708 |
| | | 604-6002-2 | Employee Overhead - T&D (MAINT) | 199,015 |
| | | 604-7001-2 | Employee Overhead - Customer Acct | 298,919 |
| | | 604-8001-2 | Employee Overhead - Admin & Genl | 273,875 |
| Employee Overhead | 997,517 | | | 997,517 |
| | | 610-1001-2 | Purchased Water | 8,221,642 |
| | | 610-1100-2 | Purchased Water - Unbilled (BGMU) | (72,033) |
| Purchased Water | 8,149,609 | | | 8,149,609 |
| | | 615-5001-2 | Purchased Power- Source | 535,575 |
| | | 615-1021-2 | Purchased Power- Source (ENERNOC) | (7,959) |
| | | 615-5001-2 | Purchased Power- T&D | 7,616 |
| | | 615-5011-2 | Purchased Power- Master Mtrs | 4,902 |
| | | 615-7001-2 | Purchased Power- Property | 2,376 |
| Purchased Power | 542,510 | | | 542,510 |
| | | 620-5001-2 | Materials & Supplies- T&D (Oper) | 37,130 |
| | | 620-6002-2 | Materials & Supplies- T&D (Maint) | 261,520 |
| | | 620-7001-2 | Materials & Supplies - Customer Acct | 17,514 |
| | | 620-8001-2 | Materials & Supplies - Admin & Genl | 31,108 |
| Materials and Supplies | 347,272 | | | 347,272 |

| STATEMENT OF ADJUSTED OPERATIONS | | GENERAL LEDGER | | |
|---|---|---|---|---|
| Description | Test Year | Account | Description | Amount |
| | | 632-1001-2 | Contract Accounting- Source (Oper) | 1,817 |
| | | 632-2002-2 | Contract Accounting- Source (Maint) | 1,817 |
| | | 632-5001-2 | Contract Accounting- T&D (Oper) | 1,817 |
| | | 632-6002-2 | Contract Accounting- T&D (Maint) | 1,817 |
| | | 632-7001-2 | Contract Accounting - Customer Acct | 3,633 |
| | | 632-8001-2 | Contract Accounting - Admin & Genl | 3,633 |
| Contractual Services- Accounting | 14,534 | | | 14,534 |
| Contractual Services- Legal | 16,922 | 633-8001-2 | Contract Legal - Admin & Genl | 16,922 |
| | | 635-5001-2 | Contract Other- T&D (Oper) | 50,543 |
| | | 635-6002-2 | Contract Other- T&D (Maint) | 178,649 |
| | | 635-7001-2 | Contract Other - Customer Acct | 224,862 |
| | | 635-8001-2 | Contract Other - Admin & Genl | 318,815 |
| Contractual Services- Other | 772,869 | | | 772,869 |
| | | 641-1001-2 | Rent & Utilities- Source (Oper) | 4,924 |
| | | 641-5001-2 | Rent & Utilities- T&D (Oper) | 18,877 |
| | | 641-7001-2 | Rent & Utilities - Customer Acct | 28,725 |
| | | 641-8001-2 | Rent & Utilities - Admin & Genl | 4,924 |
| Rental of Building/Real Prop. | 57,450 | | | 57,450 |
| | | 650-1001-2 | Equipment Expense- Source (Oper) | 81 |
| | | 650-5001-2 | Equipment Expense- T&D (Oper) | 108,465 |
| | | 650-6002-2 | Equipment Expense- T&D (Maint) | 98,814 |
| | | 650-7001-2 | Equipment Expenses - Customer Acct | 79,805 |
| | | 650-8001-2 | Equipment Expenses - Admin & Genl | 9,716 |
| Equipment Expenses | 296,881 | | | 296,881 |
| | | 657-1001-2 | Insurance G/L- Source (Oper) | 11,569 |
| | | 657-5001-2 | Insurance G/L- T&D (Oper) | 49,168 |
| | | 657-7001-2 | Insurance G/L - Customer Acct | 5,784 |
| | | 657-8001-2 | Insurance G/L - Admin & Genl | 5,784 |
| Insurance- Gen. Liability | 72,305 | | | 72,305 |
| Insurance- Other | 2,843 | 659-8001-2 | Insurance Other | 2,843 |
| Regulatory Expense | 20,980 | 408-0000-2 | PSC Assessment | 20,980 |
| Bad Debt | 20,960 | 670-7001-2 | Bad Debt Expense | 20,960 |
| | | 675-7001-2 | Misc Expense - Customer Acct | 5,246 |
| | | 675-7021-2 | Misc Expense- Cash Over/Short (CIS) | (3) |
| | | 675-8001-2 | Misc Expense - Admin & Genl | 50,260 |
| Miscellaneous Expenses | 55,503 | | | 55,503 |
| Misc Non-Utility Income | (11,001) | 421-0001-2 | Non-Utility Income- Miscellaneous | (11,001) |
| Unrealized (Gain)/Loss on Invest | 3,996 | 426-0000-2 | Unrealized (Gain)/Loss on Investments | 3,996 |

| STATEMENT OF ADJUSTED OPERATIONS | | GENERAL LEDGER | | |
|---|---|---|---|---|
| Description | Test Year | Account | Description | Amount |
| | | 403-3043-2 | Depr Expense - Structures | 205,951 |
| | | 403-3047-2 | Depr Expense - 505 HWY 31W (Block Bldg) | 5,988 |
| | | 403-3048-2 | Depr Expense - 503 HWY 31W (Rental Bldg) | 4,116 |
| | | 403-3112-2 | Depr Expense - Equipment (Elec Pumping) | 133,962 |
| | | 403-3304-2 | Depr Expense - Standpipes | 420,299 |
| | | 403-3314-2 | Depr Expense - Mains (Trans & Distr) | 1,112,300 |
| | | 403-3324-2 | Depr Expense - SCADA | 62,241 |
| | | 403-3334-2 | Depr Expense - Meters (Services) | 337,967 |
| | | 403-3344-2 | Depr Expense - Meters | 973,066 |
| | | 403-3345-2 | Depr Expense - Meters (Installation) | 179,775 |
| | | 403-3354-2 | Depr Expense - Hydrants | 114,119 |
| | | 403-3392-2 | Depr Expense - Equipment (Pumping) | 12 |
| | | 403-3394-2 | Depr Expense - Equip (Trans & Distr) | 6 |
| | | 403-3400-2 | Depr Expense - Software | 123,372 |
| | | 403-3401-2 | Depr Expense - Hardware | 68,319 |
| | | 403-3405-2 | Depr Expense - Furniture and Equipment | 606 |
| | | 403-3465-2 | Depr Expense - Equip (Communication) | 21,250 |
| Depreciation Expenses | 3,763,349 | | | 3,763,349 |
| Taxes other than Income | 2,295 | 604-8011-2 | Employee Overhead - Commissioner SS & M | 2,295 |
| Net Utility Operating Income | 154,297 | | | 154,297 |

**WARREN COUNTY WATER DISTRICT**

**Case No. 2024-00200**
**Response to Commission Staff's Second Request for Information**

**Question No. 2-4**

**Responding Witness: Jeff Peeples**

**Q 2-4. Refer to the Application, Attachment 8, Revenue Requirement Table.**

**a. For each outstanding debt issuance still active, provide the amortization schedule.**

**b. For each outstanding debt issuance still active, provide the case number in which Warren District was authorized to issue the debt.**

A 2-4.

2-4a. See **Attachment 2-4a** for the individual amortization schedules for Warren District's outstanding debt issuances. Filed separately as **Exhibit 2-4a_Debt Schedule** is an Excel spreadsheet compiling information from all of the amortization schedules.

2-4b. The charts on the following page provide the information requested.

# Warren County Water District – Water Division
# Schedule of Outstanding Long-Term Debt

## For the Year Ended December 31, 2023

| Description | Date of Issue | Date of Maturity | Amount Outstanding | PSC Case Number |
|---|---|---|---|---|
| Series 2005A, USDA | 6/27/2006 | 1/1/2045 | $ 928,000 | 2005-00299 |
| Series 2013B, RWFA | 2/27/2013 | 2/1/2028 | 583,771 | 2012-00043 |
| Series 2016G, RWFA | 5/12/2016 | 2/1/2030 | 1,250,000 | 2016-00134 |
| Series 2020, KIA | 2/12/2021 | 12/1/2040 | 1,770,415 | 2020-00052 |
| Series 2021A, RWFA | 6/6/2021 | 2/1/2039 | 1,370,000 | 2021-00007 |
| Series 2022D, RWFA | 10/27/2022 | 8/1/2024 | 3,615,380 | N/A Short-Term |

## As of July 31, 2024

| Description | Date of Issue | Date of Maturity | Amount Outstanding | PSC Case Number |
|---|---|---|---|---|
| Series 2024D, RWFA | 7/30/2024 | 8/1/2025 | $ 3,777,547 | N/A Short-Term |

# Attachment 2-4a

## Outstanding Debt Amortization Schedules

**WARREN COUNTY WATER DISTRICT**
USDA / Rural Development Revenue Bonds
Series 2005A (Revised 8/22/2012)

| | | | |
|---|---|---|---|
| Amount of Bonds: | $ 1,250,000.00 | First Interest Period | 6/30/2006 |
| Interest Rate: | 4.250% | Closing Date of Bonds | 6/26/2006 |
| | | Days Interest - First Interest Period | 4 |

| | Series 2005A Bonds | | | | | Net Debt Service | |
|---|---|---|---|---|---|---|---|
| Payment Date | Year | Principal | Interest Rate | Principal Balance | Interest | Period Payment | Fiscal Year Payment |
| 7/1/2006 | 2006 | - | | 1,250,000.00 | 582.19 | 582.19 | 582.19 |
| 1/1/2007 | 2007 | 14,000.00 | 4.250% | 1,236,000.00 | 26,562.50 | 40,562.50 | |
| 7/1/2007 | | | | 1,236,000.00 | 26,265.00 | 26,265.00 | 66,827.50 |
| 1/1/2008 | 2008 | 14,000.00 | 4.250% | 1,222,000.00 | 26,265.00 | 40,265.00 | |
| 7/1/2008 | | | | 1,222,000.00 | 25,967.50 | 25,967.50 | 66,232.50 |
| 1/1/2009 | 2009 | 14,000.00 | 4.250% | 1,208,000.00 | 25,967.50 | 39,967.50 | |
| 7/1/2009 | | | | 1,208,000.00 | 25,670.00 | 25,670.00 | 65,637.50 |
| 1/1/2010 | 2010 | 15,000.00 | 4.250% | 1,193,000.00 | 25,670.00 | 40,670.00 | |
| 7/1/2010 | | | | 1,193,000.00 | 25,351.25 | 25,351.25 | 66,021.25 |
| 1/1/2011 | 2011 | 16,000.00 | 4.250% | 1,177,000.00 | 25,351.25 | 41,351.25 | |
| 7/1/2011 | | | | 1,177,000.00 | 25,011.25 | 25,011.25 | 66,362.50 |
| 1/1/2012 | 2012 | 16,000.00 | 4.250% | 1,161,000.00 | 25,011.25 | 41,011.25 | |
| 7/1/2012 | | | | 1,161,000.00 | 24,671.25 | 24,671.25 | 65,682.50 |
| 1/1/2013 | 2013 | 17,000.00 | 4.250% | 1,144,000.00 | 24,671.25 | 41,671.25 | |
| 7/1/2013 | | | | 1,144,000.00 | 24,310.00 | 24,310.00 | 65,981.25 |
| 1/1/2014 | 2014 | 18,000.00 | 4.250% | 1,126,000.00 | 24,310.00 | 42,310.00 | |
| 7/1/2014 | | | | 1,126,000.00 | 23,927.50 | 23,927.50 | 66,237.50 |
| 1/1/2015 | 2015 | 18,000.00 | 4.250% | 1,108,000.00 | 23,927.50 | 41,927.50 | |
| 7/1/2015 | | | | 1,108,000.00 | 23,545.00 | 23,545.00 | 65,472.50 |
| 1/1/2016 | 2016 | 19,000.00 | 4.250% | 1,089,000.00 | 23,545.00 | 42,545.00 | |
| 7/1/2016 | | | | 1,089,000.00 | 23,141.25 | 23,141.25 | 65,686.25 |
| 1/1/2017 | 2017 | 20,000.00 | 4.250% | 1,069,000.00 | 23,141.25 | 43,141.25 | |
| 7/1/2017 | | | | 1,069,000.00 | 22,716.25 | 22,716.25 | 65,857.50 |
| 1/1/2018 | 2018 | 21,000.00 | 4.250% | 1,048,000.00 | 22,716.25 | 43,716.25 | |
| 7/1/2018 | | | | 1,048,000.00 | 22,270.00 | 22,270.00 | 65,986.25 |
| 1/1/2019 | 2019 | 22,000.00 | 4.250% | 1,026,000.00 | 22,270.00 | 44,270.00 | |
| 7/1/2019 | | | | 1,026,000.00 | 21,802.50 | 21,802.50 | 66,072.50 |
| 1/1/2020 | 2020 | 23,000.00 | 4.250% | 1,003,000.00 | 21,802.50 | 44,802.50 | |
| 7/1/2020 | | | | 1,003,000.00 | 21,313.75 | 21,313.75 | 66,116.25 |
| 1/1/2021 | 2021 | 24,000.00 | 4.250% | 979,000.00 | 21,313.75 | 45,313.75 | |
| 7/1/2021 | | | | 979,000.00 | 20,803.75 | 20,803.75 | 66,117.50 |
| 1/1/2022 | 2022 | 25,000.00 | 4.250% | 954,000.00 | 20,803.75 | 45,803.75 | |
| 7/1/2022 | | | | 954,000.00 | 20,272.50 | 20,272.50 | 66,076.25 |
| 1/1/2023 | 2023 | 26,000.00 | 4.250% | 928,000.00 | 20,272.50 | 46,272.50 | |
| 7/1/2023 | | | | 928,000.00 | 19,720.00 | 19,720.00 | 65,992.50 |
| 1/1/2024 | 2024 | 27,000.00 | 4.250% | 901,000.00 | 19,720.00 | 46,720.00 | |
| 7/1/2024 | | | | 901,000.00 | 19,146.25 | 19,146.25 | 65,866.25 |
| 1/1/2025 | 2025 | 28,000.00 | 4.250% | 873,000.00 | 19,146.25 | 47,146.25 | |
| 7/1/2025 | | | | 873,000.00 | 18,551.25 | 18,551.25 | 65,697.50 |
| 1/1/2026 | 2026 | 29,000.00 | 4.250% | 844,000.00 | 18,551.25 | 47,551.25 | |
| 7/1/2026 | | | | 844,000.00 | 17,935.00 | 17,935.00 | 65,486.25 |
| 1/1/2027 | 2027 | 30,000.00 | 4.250% | 814,000.00 | 17,935.00 | 47,935.00 | |
| 7/1/2027 | | | | 814,000.00 | 17,297.50 | 17,297.50 | 65,232.50 |
| 1/1/2028 | 2028 | 32,000.00 | 4.250% | 782,000.00 | 17,297.50 | 49,297.50 | |
| 7/1/2028 | | | | 782,000.00 | 16,617.50 | 16,617.50 | 65,915.00 |
| 1/1/2029 | 2029 | 33,000.00 | 4.250% | 749,000.00 | 16,617.50 | 49,617.50 | |
| 7/1/2029 | | | | 749,000.00 | 15,916.25 | 15,916.25 | 65,533.75 |
| 1/1/2030 | 2030 | 34,000.00 | 4.250% | 715,000.00 | 15,916.25 | 49,916.25 | |
| 7/1/2030 | | | | 715,000.00 | 15,193.75 | 15,193.75 | 65,110.00 |
| 1/1/2031 | 2031 | 36,000.00 | 4.250% | 679,000.00 | 15,193.75 | 51,193.75 | |
| 7/1/2031 | | | | 679,000.00 | 14,428.75 | 14,428.75 | 65,622.50 |
| 1/1/2032 | 2032 | 37,000.00 | 4.250% | 642,000.00 | 14,428.75 | 51,428.75 | |
| 7/1/2032 | | | | 642,000.00 | 13,642.50 | 13,642.50 | 65,071.25 |
| 1/1/2033 | 2033 | 39,000.00 | 4.250% | 603,000.00 | 13,642.50 | 52,642.50 | |
| 7/1/2033 | | | | 603,000.00 | 12,813.75 | 12,813.75 | 65,456.25 |
| 1/1/2034 | 2034 | 41,000.00 | 4.250% | 562,000.00 | 12,813.75 | 53,813.75 | |
| 7/1/2034 | | | | 562,000.00 | 11,942.50 | 11,942.50 | 65,756.25 |
| 1/1/2035 | 2035 | 42,000.00 | 4.250% | 520,000.00 | 11,942.50 | 53,942.50 | |
| 7/1/2035 | | | | 520,000.00 | 11,050.00 | 11,050.00 | 64,992.50 |
| 1/1/2036 | 2036 | 44,000.00 | 4.250% | 476,000.00 | 11,050.00 | 55,050.00 | |
| 7/1/2036 | | | | 476,000.00 | 10,115.00 | 10,115.00 | 65,165.00 |
| 1/1/2037 | 2037 | 46,000.00 | 4.250% | 430,000.00 | 10,115.00 | 56,115.00 | |
| 7/1/2037 | | | | 430,000.00 | 9,137.50 | 9,137.50 | 65,252.50 |
| 1/1/2038 | 2038 | 48,000.00 | 4.250% | 382,000.00 | 9,137.50 | 57,137.50 | |
| 7/1/2038 | | | | 382,000.00 | 8,117.50 | 8,117.50 | 65,255.00 |
| 1/1/2039 | 2039 | 50,000.00 | 4.250% | 332,000.00 | 8,117.50 | 58,117.50 | |
| 7/1/2039 | | | | 332,000.00 | 7,055.00 | 7,055.00 | 65,172.50 |
| 1/1/2040 | 2040 | 52,000.00 | 4.250% | 280,000.00 | 7,055.00 | 59,055.00 | |
| 7/1/2040 | | | | 280,000.00 | 5,950.00 | 5,950.00 | 65,005.00 |
| 1/1/2041 | 2041 | 54,000.00 | 4.250% | 226,000.00 | 5,950.00 | 59,950.00 | |
| 7/1/2041 | | | | 226,000.00 | 4,802.50 | 4,802.50 | 64,752.50 |
| 1/1/2042 | 2042 | 57,000.00 | 4.250% | 169,000.00 | 4,802.50 | 61,802.50 | |
| 7/1/2042 | | | | 169,000.00 | 3,591.25 | 3,591.25 | 65,393.75 |
| 1/1/2043 | 2043 | 59,000.00 | 4.250% | 110,000.00 | 3,591.25 | 62,591.25 | |
| 7/1/2043 | | | | 110,000.00 | 2,337.50 | 2,337.50 | 64,928.75 |
| 1/1/2044 | 2044 | 62,000.00 | 4.250% | 48,000.00 | 2,337.50 | 64,337.50 | |
| 7/1/2044 | | | | 48,000.00 | 1,020.00 | 1,020.00 | 65,357.50 |
| 1/1/2045 | 2045 | 48,000.00 | 4.250% | - | 1,020.00 | 49,020.00 | 49,020.00 |
| **TOTALS** | | 1,250,000.00 | - | - | 1,293,984.69 | 2,543,984.69 | 2,543,984.69 |

**$ 1,845,032.51 93.42%**

Kentucky Rural Water Finance Corporation
Flexible Term Finance Program, Series 2013B
Schedule 2 - Debt Service (Water Improvements)

## Debt Service Schedule

| Date | Principal | Coupon | Interest | Total P+I | Fiscal Total | Balance |
|---|---|---|---|---|---|---|
| 02/27/2013 | - | - | - | - | - | - |
| 08/01/2013 | - | - | 20,992.92 | 20,992.92 | - | - |
| 12/31/2013 | - | - | - | - | 20,992.92 | - |
| 02/01/2014 | 116,774.21 | - | 24,537.19 | 141,311.39 | - | 1,728,258.30 |
| 08/01/2014 | - | - | 23,194.28 | 23,194.28 | - | - |
| 12/31/2014 | - | - | - | - | 164,505.68 | - |
| 02/01/2015 | 116,774.21 | - | 23,194.28 | 139,968.49 | - | 1,611,484.09 |
| 08/01/2015 | - | - | 21,851.38 | 21,851.38 | - | - |
| 12/31/2015 | - | - | - | - | 161,819.87 | - |
| 02/01/2016 | 121,445.18 | - | 21,851.38 | 143,296.56 | - | 1,490,038.91 |
| 08/01/2016 | - | - | 20,454.76 | 20,454.76 | - | - |
| 12/31/2016 | - | - | - | - | 163,751.32 | - |
| 02/01/2017 | 121,445.18 | - | 20,454.76 | 141,899.94 | - | 1,368,593.73 |
| 08/01/2017 | - | - | 19,058.14 | 19,058.14 | - | - |
| 12/31/2017 | - | - | - | - | 160,958.08 | - |
| 02/01/2018 | 121,445.18 | - | 19,058.14 | 140,503.32 | - | 1,247,148.56 |
| 08/01/2018 | - | - | 17,661.52 | 17,661.52 | - | - |
| 12/31/2018 | - | - | - | - | 158,164.84 | - |
| 02/01/2019 | 126,116.15 | - | 17,661.52 | 143,777.67 | - | 1,121,032.41 |
| 08/01/2019 | - | - | 16,211.18 | 16,211.18 | - | - |
| 12/31/2019 | - | - | - | - | 159,988.85 | - |
| 02/01/2020 | 130,787.11 | - | 16,211.18 | 146,998.30 | - | 990,245.29 |
| 08/01/2020 | - | - | 14,707.13 | 14,707.13 | - | - |
| 12/31/2020 | - | - | - | - | 161,705.43 | - |
| 02/01/2021 | 130,787.11 | - | 14,707.13 | 145,494.25 | - | 859,458.18 |
| 08/01/2021 | - | - | 12,876.11 | 12,876.11 | - | - |
| 12/31/2021 | - | - | - | - | 158,370.36 | - |
| 02/01/2022 | 135,458.08 | - | 12,876.11 | 148,334.20 | - | 724,000.10 |
| 08/01/2022 | - | - | 10,979.70 | 10,979.70 | - | - |
| 12/31/2022 | - | - | - | - | 159,313.90 | - |
| 02/01/2023 | 140,129.05 | - | 10,979.70 | 151,108.75 | - | 583,871.05 |
| 08/01/2023 | - | - | 9,017.89 | 9,017.89 | - | - |
| 12/31/2023 | - | - | - | - | 160,126.64 | - |
| 02/01/2024 | 144,800.02 | - | 9,017.89 | 153,817.91 | - | 439,071.03 |
| 08/01/2024 | - | - | 6,900.19 | 6,900.19 | - | - |
| 12/31/2024 | - | - | - | - | 160,718.10 | - |
| 02/01/2025 | 144,800.02 | - | 6,900.19 | 151,700.21 | - | 294,271.01 |
| 08/01/2025 | - | - | 4,691.99 | 4,691.99 | - | - |
| 12/31/2025 | - | - | - | - | 156,392.20 | - |
| 02/01/2026 | 130,787.11 | - | 4,691.99 | 135,479.10 | - | 163,483.89 |
| 08/01/2026 | - | - | 2,697.48 | 2,697.48 | - | - |
| 12/31/2026 | - | - | - | - | 138,176.59 | - |
| 02/01/2027 | 135,458.08 | - | 2,697.48 | 138,155.57 | - | 28,025.81 |
| 08/01/2027 | - | - | 462.43 | 462.43 | - | - |
| 12/31/2027 | - | - | - | - | 138,617.99 | - |
| 02/01/2028 | 28,025.81 | - | 462.43 | 28,488.24 | - | 0.00 |
| 12/31/2028 | - | - | - | - | 28,488.24 | - |
| **Total** | **$1,845,032.51** | **-** | **$407,058.48** | **$2,252,090.99** | **$2,252,090.99** | |

Final

**$2,295,000**

Kentukcy Rural Water Finance Corporation

Public Projects Refunidng Revenue Bonds, Series 2016 B

Warren County Water District

# Debt Service Schedule

| Date | Principal | Coupon | Interest | Total P+I | Fiscal Total |
|---|---|---|---|---|---|
| 05/12/2016 | - | - | - | - | - |
| 02/01/2017 | 120,000.00 | 3.250% | 48,040.90 | 168,040.90 | - |
| 08/01/2017 | - | - | 31,437.50 | 31,437.50 | - |
| 12/31/2017 | - | - | - | - | 199,478.40 |
| 02/01/2018 | 145,000.00 | 3.250% | 31,437.50 | 176,437.50 | - |
| 08/01/2018 | - | - | 29,081.25 | 29,081.25 | - |
| 12/31/2018 | - | - | - | - | 205,518.75 |
| 02/01/2019 | 145,000.00 | 3.250% | 29,081.25 | 174,081.25 | - |
| 08/01/2019 | - | - | 26,725.00 | 26,725.00 | - |
| 12/31/2019 | - | - | - | - | 200,806.25 |
| 02/01/2020 | 155,000.00 | 3.250% | 26,725.00 | 181,725.00 | - |
| 08/01/2020 | - | - | 24,206.25 | 24,206.25 | - |
| 12/31/2020 | - | - | - | - | 205,931.25 |
| 02/01/2021 | 155,000.00 | 2.250% | 24,206.25 | 179,206.25 | - |
| 08/01/2021 | - | - | 22,462.50 | 22,462.50 | - |
| 12/31/2021 | - | - | - | - | 201,668.75 |
| 02/01/2022 | 160,000.00 | 2.250% | 22,462.50 | 182,462.50 | - |
| 08/01/2022 | - | - | 20,662.50 | 20,662.50 | - |
| 12/31/2022 | - | - | - | - | 203,125.00 |
| 02/01/2023 | 165,000.00 | 2.250% | 20,662.50 | 185,662.50 | - |
| 08/01/2023 | - | - | 18,806.25 | 18,806.25 | - |
| 12/31/2023 | - | - | - | - | 204,468.75 |
| 02/01/2024 | 165,000.00 | 2.250% | 18,806.25 | 183,806.25 | - |
| 08/01/2024 | - | - | 16,950.00 | 16,950.00 | - |
| 12/31/2024 | - | - | - | - | 200,756.25 |
| 02/01/2025 | 165,000.00 | 3.250% | 16,950.00 | 181,950.00 | - |
| 08/01/2025 | - | - | 14,268.75 | 14,268.75 | - |
| 12/31/2025 | - | - | - | - | 196,218.75 |
| 02/01/2026 | 175,000.00 | 3.250% | 14,268.75 | 189,268.75 | - |
| 08/01/2026 | - | - | 11,425.00 | 11,425.00 | - |
| 12/31/2026 | - | - | - | - | 200,693.75 |
| 02/01/2027 | 180,000.00 | 2.750% | 11,425.00 | 191,425.00 | - |
| 08/01/2027 | - | - | 8,950.00 | 8,950.00 | - |
| 12/31/2027 | - | - | - | - | 200,375.00 |
| 02/01/2028 | 185,000.00 | 3.000% | 8,950.00 | 193,950.00 | - |
| 08/01/2028 | - | - | 6,175.00 | 6,175.00 | - |
| 12/31/2028 | - | - | - | - | 200,125.00 |
| 02/01/2029 | 185,000.00 | 3.250% | 6,175.00 | 191,175.00 | - |
| 08/01/2029 | - | - | 3,168.75 | 3,168.75 | - |
| 12/31/2029 | - | - | - | - | 194,343.75 |
| 02/01/2030 | 195,000.00 | 3.250% | 3,168.75 | 198,168.75 | - |
| 12/31/2030 | - | - | - | - | 198,168.75 |
| **Total** | **$2,295,000.00** | **-** | **$516,678.40** | **$2,811,678.40** | **-** |

**KENTUCKY INFRASTRUCTURE AUTHORITY**
**REPAYMENT SCHEDULE**
**LOAN #C19-002**
**WARREN COUNTY WATER DISTRICT**
**FINAL**

**3.00% Interest**
**$66,854.20 P & I Calculation**

| Payment Date | Principal Due | Interest Due | Interest Rate | Principal & Interest | Servicing Fee | Credit Due | Total Payment | Principal Balance | R & M Reserve | Total Reserve |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | $2,000,000.00 | | |
| 06/01/21 | $36,854.20 | $30,983.33 | 3.00% | $67,837.53 | $1,832.31 | $0.00 | $69,669.84 | $1,963,145.80 | $0.00 | $0.00 |
| 12/01/21 | $37,407.01 | $29,447.19 | 3.00% | $66,854.20 | $1,963.15 | $0.00 | $68,817.35 | $1,925,738.79 | $5,000.00 | $5,000.00 |
| 06/01/22 | $37,968.12 | $28,886.08 | 3.00% | $66,854.20 | $1,925.74 | $0.00 | $68,779.94 | $1,887,770.67 | $0.00 | $5,000.00 |
| 12/01/22 | $38,537.64 | $28,316.56 | 3.00% | $66,854.20 | $1,887.77 | $0.00 | $68,741.97 | $1,849,233.03 | $5,000.00 | $10,000.00 |
| 06/01/23 | $39,115.70 | $27,738.50 | 3.00% | $66,854.20 | $1,849.23 | $0.00 | $68,703.43 | $1,810,117.33 | $0.00 | $10,000.00 |
| 12/01/23 | $39,702.44 | $27,151.76 | 3.00% | $66,854.20 | $1,810.12 | $0.00 | $68,664.32 | $1,770,414.89 | $5,000.00 | $15,000.00 |
| 06/01/24 | $40,297.98 | $26,556.22 | 3.00% | $66,854.20 | $1,770.41 | $0.00 | $68,624.61 | $1,730,116.91 | $0.00 | $15,000.00 |
| 12/01/24 | $40,902.45 | $25,951.75 | 3.00% | $66,854.20 | $1,730.12 | $0.00 | $68,584.32 | $1,689,214.46 | $5,000.00 | $20,000.00 |
| 06/01/25 | $41,515.98 | $25,338.22 | 3.00% | $66,854.20 | $1,689.21 | $0.00 | $68,543.41 | $1,647,698.48 | $0.00 | $20,000.00 |
| 12/01/25 | $42,138.72 | $24,715.48 | 3.00% | $66,854.20 | $1,647.70 | $0.00 | $68,501.90 | $1,605,559.76 | $5,000.00 | $25,000.00 |
| 06/01/26 | $42,770.80 | $24,083.40 | 3.00% | $66,854.20 | $1,605.56 | $0.00 | $68,459.76 | $1,562,788.96 | $0.00 | $25,000.00 |
| 12/01/26 | $43,412.37 | $23,441.83 | 3.00% | $66,854.20 | $1,562.79 | $0.00 | $68,416.99 | $1,519,376.59 | $5,000.00 | $30,000.00 |
| 06/01/27 | $44,063.55 | $22,790.65 | 3.00% | $66,854.20 | $1,519.38 | $0.00 | $68,373.58 | $1,475,313.04 | $0.00 | $30,000.00 |
| 12/01/27 | $44,724.50 | $22,129.70 | 3.00% | $66,854.20 | $1,475.31 | $0.00 | $68,329.51 | $1,430,588.54 | $5,000.00 | $35,000.00 |
| 06/01/28 | $45,395.37 | $21,458.83 | 3.00% | $66,854.20 | $1,430.59 | $0.00 | $68,284.79 | $1,385,193.17 | $0.00 | $35,000.00 |
| 12/01/28 | $46,076.30 | $20,777.90 | 3.00% | $66,854.20 | $1,385.19 | $0.00 | $68,239.39 | $1,339,116.87 | $5,000.00 | $40,000.00 |
| 06/01/29 | $46,767.45 | $20,086.75 | 3.00% | $66,854.20 | $1,339.12 | $0.00 | $68,193.32 | $1,292,349.42 | $0.00 | $40,000.00 |
| 12/01/29 | $47,468.96 | $19,385.24 | 3.00% | $66,854.20 | $1,292.35 | $0.00 | $68,146.55 | $1,244,880.46 | $5,000.00 | $45,000.00 |
| 06/01/30 | $48,180.99 | $18,673.21 | 3.00% | $66,854.20 | $1,244.88 | $0.00 | $68,099.08 | $1,196,699.47 | $0.00 | $45,000.00 |
| 12/01/30 | $48,903.71 | $17,950.49 | 3.00% | $66,854.20 | $1,196.70 | $0.00 | $68,050.90 | $1,147,795.76 | $5,000.00 | $50,000.00 |
| 06/01/31 | $49,637.26 | $17,216.94 | 3.00% | $66,854.20 | $1,147.80 | $0.00 | $68,002.00 | $1,098,158.50 | $0.00 | $50,000.00 |
| 12/01/31 | $50,381.82 | $16,472.38 | 3.00% | $66,854.20 | $1,098.16 | $0.00 | $67,952.36 | $1,047,776.68 | $5,000.00 | $55,000.00 |
| 06/01/32 | $51,137.55 | $15,716.65 | 3.00% | $66,854.20 | $1,047.78 | $0.00 | $67,901.98 | $996,639.13 | $0.00 | $55,000.00 |
| 12/01/32 | $51,904.61 | $14,949.59 | 3.00% | $66,854.20 | $996.64 | $0.00 | $67,850.84 | $944,734.52 | $5,000.00 | $60,000.00 |
| 06/01/33 | $52,683.18 | $14,171.02 | 3.00% | $66,854.20 | $944.73 | $0.00 | $67,798.93 | $892,051.34 | $0.00 | $60,000.00 |
| 12/01/33 | $53,473.43 | $13,380.77 | 3.00% | $66,854.20 | $892.05 | $0.00 | $67,746.25 | $838,577.91 | $5,000.00 | $65,000.00 |
| 06/01/34 | $54,275.53 | $12,578.67 | 3.00% | $66,854.20 | $838.58 | $0.00 | $67,692.78 | $784,302.38 | $0.00 | $65,000.00 |
| 12/01/34 | $55,089.66 | $11,764.54 | 3.00% | $66,854.20 | $784.30 | $0.00 | $67,638.50 | $729,212.72 | $5,000.00 | $70,000.00 |
| 06/01/35 | $55,916.01 | $10,938.19 | 3.00% | $66,854.20 | $729.21 | $0.00 | $67,583.41 | $673,296.71 | $0.00 | $70,000.00 |
| 12/01/35 | $56,754.75 | $10,099.45 | 3.00% | $66,854.20 | $673.30 | $0.00 | $67,527.50 | $616,541.96 | $5,000.00 | $75,000.00 |
| 06/01/36 | $57,606.07 | $9,248.13 | 3.00% | $66,854.20 | $616.54 | $0.00 | $67,470.74 | $558,935.89 | $0.00 | $75,000.00 |
| 12/01/36 | $58,470.16 | $8,384.04 | 3.00% | $66,854.20 | $558.94 | $0.00 | $67,413.14 | $500,465.73 | $5,000.00 | $80,000.00 |
| 06/01/37 | $59,347.21 | $7,506.99 | 3.00% | $66,854.20 | $500.47 | $0.00 | $67,354.67 | $441,118.52 | $0.00 | $80,000.00 |
| 12/01/37 | $60,237.42 | $6,616.78 | 3.00% | $66,854.20 | $441.12 | $0.00 | $67,295.32 | $380,881.10 | $5,000.00 | $85,000.00 |
| 06/01/38 | $61,140.98 | $5,713.22 | 3.00% | $66,854.20 | $380.88 | $0.00 | $67,235.08 | $319,740.12 | $0.00 | $85,000.00 |
| 12/01/38 | $62,058.10 | $4,796.10 | 3.00% | $66,854.20 | $319.74 | $0.00 | $67,173.94 | $257,682.02 | $5,000.00 | $90,000.00 |
| 06/01/39 | $62,988.97 | $3,865.23 | 3.00% | $66,854.20 | $257.68 | $0.00 | $67,111.88 | $194,693.05 | $0.00 | $90,000.00 |
| 12/01/39 | $63,933.80 | $2,920.40 | 3.00% | $66,854.20 | $194.69 | $0.00 | $67,048.89 | $130,759.25 | $5,000.00 | $95,000.00 |
| 06/01/40 | $64,892.81 | $1,961.39 | 3.00% | $66,854.20 | $130.76 | $0.00 | $66,984.96 | $65,866.44 | $0.00 | $95,000.00 |
| 12/01/40 | $65,866.44 | $987.76 | 3.00% | $66,854.20 | $65.87 | $0.00 | $66,920.07 | $0.00 | $5,000.00 | $100,000.00 |
| **Totals** | **$2,000,000.00** | **$675,151.33** | | **$2,675,151.33** | **$44,776.87** | **$0.00** | **$2,719,928.20** | | **$100,000.00** | |

Created by KIA on 02/12/2021

Warren County Water District - Water Division
Refunding through the
Kentucky Rural Water Finance Corporation

# Debt Service Schedule

| Date | Principal | Coupon | Interest | Total P+I | Fiscal Total |
|---|---|---|---|---|---|
| 06/08/2021 | - | - | - | - | - |
| 02/01/2022 | 150,000.00 | 4.250% | 36,288.94 | 186,288.94 | - |
| 08/01/2022 | - | - | 24,846.88 | 24,846.88 | - |
| 12/31/2022 | - | - | - | - | 211,135.82 |
| 02/01/2023 | 155,000.00 | 4.250% | 24,846.88 | 179,846.88 | - |
| 08/01/2023 | - | - | 21,553.13 | 21,553.13 | - |
| 12/31/2023 | - | - | - | - | 201,400.01 |
| 02/01/2024 | 160,000.00 | 4.250% | 21,553.13 | 181,553.13 | - |
| 08/01/2024 | - | - | 18,153.13 | 18,153.13 | - |
| 12/31/2024 | - | - | - | - | 199,706.26 |
| 02/01/2025 | 180,000.00 | 4.250% | 18,153.13 | 198,153.13 | - |
| 08/01/2025 | - | - | 14,328.13 | 14,328.13 | - |
| 12/31/2025 | - | - | - | - | 212,481.26 |
| 02/01/2026 | 65,000.00 | 4.250% | 14,328.13 | 79,328.13 | - |
| 08/01/2026 | - | - | 12,946.88 | 12,946.88 | - |
| 12/31/2026 | - | - | - | - | 92,275.01 |
| 02/01/2027 | 65,000.00 | 4.250% | 12,946.88 | 77,946.88 | - |
| 08/01/2027 | - | - | 11,565.63 | 11,565.63 | - |
| 12/31/2027 | - | - | - | - | 89,512.51 |
| 02/01/2028 | 70,000.00 | 4.250% | 11,565.63 | 81,565.63 | - |
| 08/01/2028 | - | - | 10,078.13 | 10,078.13 | - |
| 12/31/2028 | - | - | - | - | 91,643.76 |
| 02/01/2029 | 70,000.00 | 4.250% | 10,078.13 | 80,078.13 | - |
| 08/01/2029 | - | - | 8,590.63 | 8,590.63 | - |
| 12/31/2029 | - | - | - | - | 88,668.76 |
| 02/01/2030 | 75,000.00 | 2.250% | 8,590.63 | 83,590.63 | - |
| 08/01/2030 | - | - | 7,746.88 | 7,746.88 | - |
| 12/31/2030 | - | - | - | - | 91,337.51 |
| 02/01/2031 | 80,000.00 | 2.250% | 7,746.88 | 87,746.88 | - |
| 08/01/2031 | - | - | 6,846.88 | 6,846.88 | - |
| 12/31/2031 | - | - | - | - | 94,593.76 |
| 02/01/2032 | 85,000.00 | 2.250% | 6,846.88 | 91,846.88 | - |
| 08/01/2032 | - | - | 5,890.63 | 5,890.63 | - |
| 12/31/2032 | - | - | - | - | 97,737.51 |
| 02/01/2033 | 85,000.00 | 2.250% | 5,890.63 | 90,890.63 | - |
| 08/01/2033 | - | - | 4,934.38 | 4,934.38 | - |
| 12/31/2033 | - | - | - | - | 95,825.01 |
| 02/01/2034 | 70,000.00 | 2.250% | 4,934.38 | 74,934.38 | - |
| 08/01/2034 | - | - | 4,146.88 | 4,146.88 | - |
| 12/31/2034 | - | - | - | - | 79,081.26 |
| 02/01/2035 | 70,000.00 | 2.250% | 4,146.88 | 74,146.88 | - |
| 08/01/2035 | - | - | 3,359.38 | 3,359.38 | - |
| 12/31/2035 | - | - | - | - | 77,506.26 |
| 02/01/2036 | 70,000.00 | 2.250% | 3,359.38 | 73,359.38 | - |
| 08/01/2036 | - | - | 2,571.88 | 2,571.88 | - |
| 12/31/2036 | - | - | - | - | 75,931.26 |
| 02/01/2037 | 90,000.00 | 2.250% | 2,571.88 | 92,571.88 | - |
| 08/01/2037 | - | - | 1,559.38 | 1,559.38 | - |
| 12/31/2037 | - | - | - | - | 94,131.26 |
| 02/01/2038 | 70,000.00 | 2.250% | 1,559.38 | 71,559.38 | - |
| 08/01/2038 | - | - | 771.88 | 771.88 | - |
| 12/31/2038 | - | - | - | - | 72,331.26 |
| 02/01/2039 | 65,000.00 | 2.375% | 771.88 | 65,771.88 | - |
| 12/31/2039 | - | - | - | - | 65,771.88 |
| **Total** | **$1,675,000.00** | **-** | **$356,070.36** | **$2,031,070.36** | **-** |

**$3,615,380.00**

Kentucky Rural Water Finance Corporation
(Flexible Term Finance Program), Series 2022 D
Warren County Water District

# Debt Service Schedule

| Date | Principal | Coupon | Interest | Total P+I | Fiscal Total |
|---|---|---|---|---|---|
| 10/27/2022 | - | - | - | - | - |
| 02/01/2023 | - | - | 28,471.11 | 28,471.11 | - |
| 08/01/2023 | - | - | 54,519.15 | 54,519.15 | - |
| 12/31/2023 | - | - | - | - | 82,990.26 |
| 02/01/2024 | - | - | 54,519.15 | 54,519.15 | - |
| 08/01/2024 | 3,615,380.00 | 3.500% | 54,519.15 | 3,669,899.15 | - |
| 12/31/2024 | - | - | - | - | 3,669,899.15 |
| **Total** | **$3,615,380.00** | **-** | **$192,028.56** | **$3,807,408.56** | **-** |

## Yield Statistics

| | |
|---|---|
| Bond Year Dollars | $20,023.83 |
| Average Life | 1.761 Years |
| Average Coupon | 3.5000000% |
| Net Interest Cost (NIC) | 3.7839117% |
| True Interest Cost (TIC) | 3.7986107% |
| Bond Yield for Arbitrage Purposes | 3.5022179% |
| All Inclusive Cost (AIC) | 4.3789832% |

## IRS Form 8038

| | |
|---|---|
| Net Interest Cost | 3.5000000% |
| Weighted Average Maturity | 1.761 Years |

*Warren County Water District - Water Division*
*Rural Water Financing Agency*
*Public Projects Refunding Revenue Bonds, Series 2024 D*

**Debt Service Schedule**

| Date | Principal | Coupon | Interest | Total P+I | Fiscal Total |
|---|---|---|---|---|---|
| 07/30/2024 | - | - | - | - | - |
| 02/01/2025 | - | - | 94,963.35 | 94,963.35 | - |
| 08/01/2025 | 3,777,547.44 | 5.000% | 94,438.69 | 3,871,986.13 | - |
| 12/31/2025 | - | - | - | - | 3,966,949.47 |
| Total | $3,777,547.44 | - | $189,402.03 | $3,966,949.47 | - |

**WARREN COUNTY WATER DISTRICT**

**Case No. 2024-00200**
**Response to Commission Staff's Second Request for Information**

**Question No. 2-5**

**Responding Witness: Jeff Peeples**

**Q 2-5. Refer to the Application Exhibit 8, Statement of Adjusted Operations. Also refer to Warren District's response to Commission Staff's First Request for Information (Staff's First Request), Item 10. In the Statement of Adjusted Operations, Contractual Services – Legal is reported as $16,922; however, in the response to Staff's First Request, Item 10, it is recorded as $18,418.74. Reconcile and explain the discrepancy.**

A 2-5. The Contractual Services – Legal for Warren District's Water Division expense for the test year is **$17,847**. Two invoices were not included in the Statement of Adjusted Operations. However, these invoices were included in Warren District's Response to Staff's First Request, Item 10 ("Response to Item 10").

- Invoice number 23144-26961 for $560.00 related to a review of Warren District's Transamerica Pension Agreement, was recorded to Clearing – Employee Overhead Costs (184-5001-2) and not included in the Statement of Adjusted Operations; and

- Invoice number 1018510 for $365.37 was recorded to Contractual Other-Customer Accounts (635-7001-2) and not included in the Statement of Adjusted Operations.

Additionally, Warren District reported incorrect amounts for two invoices that were included in the Response to Item 10.

- Invoice number 1003884 for $81.00 was reported in Warren's Response to Item 10. However, this expense should have been allocated $62.53 to the Water Division and $18.47 to the Sewer Division; and
- Invoice number 1007187 for $2,426.00 was reported in Warren's Response to Item 10. However, this expense should have been allocated $1,872.87 to the Water Division and $553.13 to the Sewer Division.

See **Attachment 2-5** for a chart summarizing these reconciliations.

# Attachment 2-5

## Reconciliation of

## Contractual Services – Legal Expense

WARREN COUNTY WATER DISTRICT - WATER DIVISION
RECONCILIATION OF CONTRACTUAL SERVICES - LEGAL

| Item No. | Description | Invoice | **Stmt of Adjusted Operations** | **Staff's First Request - Item 10** | Comment |
|---|---|---|---|---|---|
| | Balance Reported | | $ 16,922 | 18,418.74 | |
| 1 | Invoice recorded to Clearing - Employee Overhead Costs (184-5001-2). | 23144-26961 | 560.00 | | Transamerica Pension Agreement Review |
| 2 | Invoice recorded to Contractual Other - Customer Accounts (635-7001-2) | 1018510 | 365.37 | | General counsel was customer account related. |
| 3 | WCWD reported incorrect amount in First Request. | 1003884 | | (18.47) | Reported total invoice amount of $81.00. This invoice was allocated between water for $62.53 and sewer for $18.47. Reconciliation takes out the sewer portion to leave the water. |
| 4 | WCWD reported incorrect amount in First Request. | 1007187 | | (553.13) | Reported total invoice amount of $2,426. This invoice was allocated between water for $1,872.87 and sewer for $553.13. Reconciliation takes out the sewer portion to leave the water. |
| | **Balance - Corrected** | | **$ 17,847** | **$ 17,847** | |

**WARREN COUNTY WATER DISTRICT**

**Case No. 2024-00200**
**Response to Commission Staff's Second Request for Information**

**Question No. 2-6**

**Responding Witness: Jeff Peeples**

**Q 2-6. Refer to the Application Exhibit 8, Statement of Adjusted Operations. Also refer to the Application, Exhibit 15, Exhibit_015_DepreciationSchedule.xlsx, Row 9354. In Exhibit 8, the test-year Depreciation Expense is $3,763,349. In Exhibit 15, the 2023 Depreciation Expense is recorded as $4,012,936. Explain and reconcile the difference between the total depreciation expenses.**

A 2-6. The Depreciation Expense for the test year is **$3,763,349**. The chart in **Attachment 2-6** describes the items and accounts contributing to the discrepancy and reconciles the discrepancies.

# Attachment 2-6

## Reconciliation of Depreciation Expense

# Warren County Water District
# Reconciliation of Depreciation Expense

| Item No. | Description | Location | Ex. 15 Depr. Sched. | Ex. 8 Stmt. of Adj. Oper. | Comment |
|---|---|---|---|---|---|
| | Net Book Value Report – 2023, Current YTD Depreciation Expense | Col 1, Row 9354 | $ 4,012,936 | $ 3,763,349 | |
| 1 | GL Asset Account #101-3045-2, Structures-Warehouse | Col I, Row 244 | (289) | | Depreciation expense recorded to Clearing - Material Handling OH account 184-7000-2. Clearing account used to allocate warehouse costs including depreciation expense to Warren, Warren Sewer, Butler, and Simpson. |
| 2 | GL Asset Account #101-3203-2, Equip-Water Treatment | Col I, Row 396 | (3,217) | | Depreciation expense reported in Current YTD is for equipment disposed in 07/2019; Note Ending Net Book Value = $0 (Col K, Row 399) |
| 3 | GL Asset Account #101-3415-2, Equip-Transportation | Col I, Row 9015 | (202,467) | | Depreciation expense recorded to Clearing - Trucks & Equipment (Expense) account 184-9000-2. Clearing account used to allocate truck & equipment costs including depreciation expense to Warren, Warren Sewer, Butler, and Simpson. |
| | | | | | |

| Item No. | Description | Location | Ex. 15 Depr. Sched. | Ex. 8 Stmt. of Adj. Oper | Comment |
|---|---|---|---|---|---|
| 4 | GL Asset Account #101-3435-2, Equip-Tools & Shop | Col I, Row 9214 | (20,586) | | Depreciation expense recorded to Clearing - Material Handling OH account 184-7000-2. Clearing account used to allocate warehouse costs including depreciation expense to Warren, Warren Sewer, Butler, and Simpson. |
| 5 | GL Asset Account #101-3455-2, Equip-Power Operated | Col I, Row 9246 | (23,026) | | Depreciation expense recorded to Clearing - Trucks & Equipment (Expense) account 184-9000-2. Clearing account used to allocate truck & equipment costs including depreciation expense to Warren, Warren Sewer, Butler, and Simpson. |
| 6 | Misc Rounding Adjustments | | (2) | | |
| | **Reconciled Total** | | **$ 3,763,349** | **$ 3,763,349** | |

**WARREN COUNTY WATER DISTRICT**

**Case No. 2024-00200**
**Response to Commission Staff's Second Request for Information**

**Question No. 2-7**

**Responding Witnesses: Jacob Cuarta and Jeff Peeples**

**Q 2-7. Refer to the Application Exhibit 8, Statement of Adjusted Operations, References, Adjustment A. Also refer to Warren District's response to Staff's First Request, Item 23. Explain the justification for all employees receiving a 2 percent increase for merit, when it is based on job performance.**

A 2-7. Reference A to the District's Statement of Adjusted Operations states that "At its November 29, 2023 board meeting the WCWD Board of Commissioners approved a 2% merit increase in all employees' salaries to begin January 1, 2024. Applying this increase resulted in a $35,235 adjustment."[1] The District's response to Staff's First Request, Item 23 explains that "[e]mployees are eligible for merit increases based upon job performance on the anniversary of their hire date" and that "merit increases are included in Warren District's budget" each year.[2]

To clarify, the District's employees do not automatically receive a two percent merit increase each year. Rather, the District budgets two percent of its employee wage expense, and then allocates merit-based increases

[1] Warren County Water District's Application, Exhibit 8 at 3 (filed July 30, 2024).
[2] Warren County Water District's Response to PSC 1-23 (filed Aug. 13, 2024).

from this budgetary fund as they are awarded, contingent on employee performance evaluations conducted by department managers. The two percent figure is a guideline used for budgeting purposes to ensure the organization has the financial capacity to reward employees who demonstrate exceptional performance, while also allowing flexibility for those whose performance may not fully meet departmental expectations. This approach allows the Board of Commissioners to approve a reasonable, equitable pool of funds that can be distributed throughout the fiscal year based on individual performance across departments.

Merit increases are outlined in the District's Employee Handbook as stated below:

> *All employees shall have a performance evaluation annually. Merit increases in compensation will normally range from 0 – 4% and will be based on employee performance provided the employee's compensation has not exceeded the position pay range. All salary increases must be approved by the General Manager.*

Each department manager is responsible for evaluating their employees' job performances and determining appropriate merit increases based on established performance criteria. For example, high-performing employees may receive increases greater than two percent, reflecting their significant contributions to the department's and the organization's overall success. Conversely, employees who do not meet performance

expectations may receive merit increases below the two percent threshold, or potentially no increase at all.

The two percent budget for merit increases serves as a tool to foster a performance-driven culture while maintaining budgetary responsibility. This framework allows Warren District to reward high performers appropriately and incentivize growth and development throughout the organization without automatically distributing the same percentage merit increase to all employees.

**WARREN COUNTY WATER DISTRICT**

**Case No. 2024-00200**
**Response to Commission Staff's Second Request for Information**

**Question No. 2-8**

**Responding Witnesses: Jeff Peeples and Ross Guffey, P.E.**

**Q 2-8. Refer to the Application Exhibit 8, Statement of Adjusted Operations. Also refer to Warren District's response to Staff's First Request, Item 30, billing analysis, and Warren District's 2023 Annual Report, page 49.**

**a. Explain why Warren District did not make an adjustment to its metered revenue as the billing analysis filed shows a metered revenue of $5,854,191, compared to total metered revenue of $15,925,794 in its Annual Report.**

**b. Explain why there is an approximate 64 percent difference between the revenues from the Annual Report and Warren District's billing analysis.**

**c. Explain how Warren District was able to verify that the proposed rates will generate the revenue required from rates if the billing analysis filed by Warren District differs from the Annual Report revenue by approximately 64 percent.**

A 2-8.

2-8a. The reference to a metered revenue of $5,854,191 is incorrect due to an inadvertent glitch in the Excel spreadsheet that was originally filed as part of Exhibit 1-30 in Warren District's Response to Commission Staff's First Request for Information. Within the Excel spreadsheet titled "Exhibit_1-30_Billing Analysis 2023 – Water

3.13.24" on the sheet titled "5-8 Inch", the formulas in row 380337 do not automatically compute the grand totals.[3] As a result, the total usage gallons and revenue for 5/8-inch meters displayed on the sheet titled "SUMMARY" appear incorrectly, resulting in an inadvertent display of $5,854,191 as the total metered revenue.

The District has corrected this formula glitch in the Excel spreadsheet filed separately as **Exhibit 2-8a_Billing Analysis Data**. With the formulas fully calculated, the spreadsheet displays the correct metered revenue of **$16,073,753.38**, which differs from the Annual Report metered revenue amount by approximately one-tenth of one percent.

2-8b. See the Response to Question No. 2-8a.

2-8c. See the Response to Question No. 2-8a.

[3] To compute the grand totals, a viewer must manually click into each cell in row 380337, click within the formula bar displayed towards the top of the screen, and press the "Enter" key.

**WARREN COUNTY WATER DISTRICT**

**Case No. 2024-00200**
**Response to Commission Staff's Second Request for Information**

**Question No. 2-9**

**Responding Witnesses: Jeff Peeples and Ross Guffey, P.E.**

**Q 2-9. Refer to Warren District's Application, Exhibit 10 as well as the responses to Staff's First Request, Item 30.**

**a. Explain why a billing analysis that differs from the one included in the Application was provided as part of Staff's First Request.**

**b. Clarify which billing analysis should be used.**

**c. Provide a copy of the one included as Attachment 10 of the Application in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible.**

A 2-9.

2-9a. The Excel spreadsheet titled "Exhibit_1-30_Billing Analysis 2023 – Water 3.13.24" that was provided in Exhibit 1-30 as part of the District's Response to Commission Staff's First Request for Information contains raw data outputs from Warren District's billing system. HDR Engineering, Inc. utilized the water volumes and number of bills computed in this spreadsheet to create the billing analysis provided as Exhibit 10 to the District's Application.

2-9b. The billing analysis provided as Exhibit 10 to the District's Application, comparing the District's current rates and revenues with the proposed rates and resulting revenues, should be used.

2-9c. See **Exhibit_2-9c Billing Analysis** for the billing analysis provided as Exhibit 10 in the requested Excel format.

**WARREN COUNTY WATER DISTRICT**

**Case No. 2024-00200**
**Response to Commission Staff's Second Request for Information**

**Question No. 2-10**

**Responding Witness: Ross Guffey, P.E.**

**Q 2-10. Refer to Exhibit 9a, the written testimony of Ross Guffey at page 5. If a billing analysis was performed, explain why no adjustment to the test period metered revenues was provided in Exhibit 8, Statement of Adjusted Operations and Revenue Requirement Calculation.**

A 2-10. The Statement of Adjusted Operations and Revenue Requirement Calculation do not propose an adjustment to the test period metered revenues because there were no known and measurable changes to metered revenues when the billing analysis was performed. There were no known and measurable changes in the usage volume of existing customers or changes in the total number of customers served.

**WARREN COUNTY WATER DISTRICT**

**Case No. 2024-00200**
**Response to Commission Staff's Second Request for Information**

**Question No. 2-11**

**Responding Witness: Jeff Peeples**

**Q 2-11. Refer to Warren District's response to Staff's First Request, Item 30, billing analysis. Provide support for the $104,058.09 and $53,049.95 in unbilled revenues for residential and commercial customers, respectively.**

A 2-11. See the Excel spreadsheet filed separately as **Exhibit_2-11 Unbilled Revenue** for support for the respective unbilled revenue amounts.

The unbilled revenues represent accounting entries that are made to record customer usage that was consumed during one calendar year but not billed until the following calendar year.[4] In other words, unbilled revenues include revenues that the District has earned but has not yet billed to customers.

This occurs because of the structure of Warren District's billing cycles. For example, a customer billed under Cycle 2 is billed on January 3, 2024 for usage consumed from November 21, 2023 to December 20, 2023. Then, that customer is billed on February 2, 2024 for usage consumed from December 20, 2023 to January 22, 2024. So although the District "earned"

[4] Warren District's fiscal year aligns with the calendar year.

the revenues associated with the December 2023 usage during the calendar year ending December 31, 2023, the District did not bill the customer for that usage until 2024.

At the end of each calendar year, the District records a journal entry that adjusts the unbilled revenue account to reflect that as customers are billed for usage from the prior calendar year, the revenues are no longer unbilled. The unbilled revenues journal entry each year thus reflects a net change from unbilled revenues recorded in the prior calender year.

The Excel spreadsheet titled "Exhibit_1-30_Billing Analysis 2023 – Water 3.13.24" includes $104,058.09 for residential unbilled revenue and $53,049.95 for commercial unbilled revenue. These amounts represent net reductions from unbilled revenues recorded in December 2022, as shown in **Exhibit_2-11 Unbilled Revenue**.

**WARREN COUNTY WATER DISTRICT**

**Case No. 2024-00200**
**Response to Commission Staff's Second Request for Information**

**Question No. 2-12**

**Responding Witness: Jeff Peeples**

**Q 2-12. Refer to Warren District's response to Staff's First Request, Item 1e, 09_Exhibit_1-1e.xlsx, Pro Forma Wage Calculation Tab, Rows 8 thru 81 and Rows 113 thru 119. Reconcile and explain why the 2024 Average Pay Rate for "Customer Service Wages Recording to 100 percent Expense in Year 2024" does not match the 2024 Average Pay Rate for the same employee in Rows 8 thru 81, as shown in the following table.**

| Dept | Position | Job Title | Row 113 thru 119 2024 Average Pay Rate | Row 8 thru 81 2024 Average Pay Rate |
|---|---|---|---|---|
| 2K | 41 | Customer Service Supervisor | $ 29.87 | $ 29.57 |
| 2I | 49 | Customer Service Representative | 21.35 | 21.09 |
| 2I | 60 | Operations Clerk | 23.11 | 22.94 |
| 2I | 199 | Customer Service Representative | 20.28 | 20.00 |
| 2I | 217 | Customer Service Representative | 17.12 | 16.85 |
| 2I | 222 | Applications Clerk | 19.45 | 19.67 |
| 2I | 224 | Customer Service Representative | 18.17 | 18.20 |

A 2-12. The difference between the customer service payrate calculations is summarized below and detailed in **Exhibit 2-12_Reconciliation of Customer Service Wages** filed separately in Excel format.

Customer Service Wage Calculation (Rows 113 thru 119)

The wage calculation is based upon the **actual** employee payrate on December 22, 2023 plus the cost-of-living increase effective on payroll

dated January 11, 2024. A provision for a budgeted merit increase was **not** included.

Customer Service Wage Calculation (Rows 8 thru 81)

The wage calculation is based upon the **average** payrate of the employee in year 2023 plus the cost-of-living increase effective on payroll dated January 11, 2024 and a budgeted two percent merit increase for year 2024.

**WARREN COUNTY WATER DISTRICT**

**Case No. 2024-00200**
**Response to Commission Staff's Second Request for Information**

**Question No. 2-13**

**Responding Witness: Jeff Peeples**

**Q 2-13. Refer to Warren District's response to Staff's First Request, Item 19, 11_Exhibit_1-19.xlsx, June 2024 Depreciation Schedule Tab, Rows 5,347 through 5,598. Explain why these meters have 10-year depreciable lives.**

A 2-13. The June 2024 Depreciation Schedule includes Badger M25 size 5/8-inch meters, Kamstrup 5/8-inch, and Master Meter 5/8-inch ultrasonic meters. These meters are being depreciated over a ten-year estimated useful life. The justification for ten-year useful life of these meter is provided below:

Badger M25 Size 5/8-inch Meters

Sample testing of Badger M25 Size 5/8-inch meters indicate meters approaching ten years of service do not meet AWWA accuracy standards. In March 2023, crews began removing Badger M25 meters that had been in service for ten years. A certified meter technician tested the meters at Warren District's certified meter shop. The accuracy testing of forty-eight (48) meters resulted in thirty-one (31) of the samples failing AWWA meter accuracy. The results of the sample testing are below:

| Water System | Total | Passed | Failed | Failure % |
|---|---|---|---|---|
| Warren | 39 | 12 | 27 | 69.2% |
| Butler | 2 | 1 | 1 | 50.0% |
| Simpson | 7 | 4 | 3 | 42.9% |
| Total | 48 | 17 | 31 | 64.6% |

Other Badger M25 meters removed from service between January and July 2023 were tested and the results showed that several meters did not meet accuracy standards after nine years of service. These results are below:

| Age | Total | Passed | Failed | Failure % |
|---|---|---|---|---|
| Less than 1 | 21 | 21 | 0 | 0.0% |
| 1 | 41 | 41 | 0 | 0.0% |
| 2 | 24 | 24 | 0 | 0.0% |
| 3 | 30 | 30 | 0 | 0.0% |
| 4 | 28 | 25 | 3 | 10.7% |
| 5 | 16 | 15 | 1 | 6.3% |
| 6 | 25 | 21 | 4 | 16.0% |
| 7 | 34 | 34 | 0 | 0.0% |
| 8 | 33 | 32 | 1 | 3.0% |
| 9 | 155 | 75 | 80 | 51.6% |
| 10 | 15 | 12 | 3 | 20.0% |
| Total | 422 | 330 | 92 | 21.8% |

Kamstrup and Master Meter 5/8-inch Ultrasonic Meters

For Kamstrup and Master Meter ultrasonic meters, each has a ten-year full replacement warranty and ten-year prorated warranty. For these meters, a ten-year useful life appropriately corresponds with the ten-year full warranty replacement period.

**WARREN COUNTY WATER DISTRICT**

**Case No. 2024-00200**
**Response to Commission Staff's Second Request for Information**

**Question No. 2-14**

**Responding Witness: Jeff Peeples**

**Q 2-14. Refer to Application, Exhibit 15, Attachment, Depreciation Schedule.**

**a. Specify which of the 5/8-inch meters on the Excel spreadsheet are Badger M25 meters.**

**b. Specify the manufacturer of each type of meter on the Excel spreadsheet as well as the associated place in the Excel spreadsheet.**

**c. Identify if any of the Badger meters are still under warranty and, if any, explain any warranty benefits.**

**d. State the number and age of any 5/8-inch meters that are not the Badger M25 meters in use by Warren District**

A 2-14.

2-14a. Filed separately as an Excel spreadsheet is **Exhibit_2-14 Depreciation Schedule.** The Badger M25 meters are identified in Columns P and Q.

2-14b. In **Exhibit_2-14 Depreciation Schedule**, the meter manufacturer is identified in Columns R and S.

2-14c. All Badger meters are under warranty as identified in Column T of **Exhibit_2-14 Depreciation Schedule.** Badger M25 5/8-inch meters are warranted to:

(1) Meet or exceed AWWA new meter accuracy standards for five (5) years from date of shipment or registration of 750,000 gallons;

(2) Meet or exceed AWWA repaired meter accuracy standards for fifteen (15) years from the date of shipment or registration of 2,500,000 gallons; and

(3) Meet or exceed the low flow accuracy of 98.5% at a rate of ¼ gallon per minute ("gmp") and low flow accuracy rate of 95% at a rate of 1/8 gmp for five (5) years from the date of shipment or registration of 675,000 gallons.

Meters that fail under the warranty, at the option of Badger Meter, will be repaired or replaced without charge to the customer. A copy of the Badger Meter Warranty is attached as **Attachment 2-14c**.

2-14d. The table on the following page provides the number, age, and model of all 5/8-inch meters in Warren District's system that are **not** Badger M25 meters.

| Age | **Sensus SRII** | **Diehl Hydrus** | **Kamstrup** | **Master Meter Sonata** | **Zenner Stealth** | **Total** |
|---|---|---|---|---|---|---|
| 0 - 5 years | 0 | 3 | 1,003 | 2 | 2 | **1,010** |
| 6 - 10 years | 44 | 0 | 0 | 0 | 0 | **44** |
| 11-15 years | 2,362 | 0 | 0 | 0 | 0 | **2,362** |
| 16-20 years | 6,246 | 0 | 0 | 0 | 0 | **6,246** |
| 21+ years | 557 | 0 | 0 | 0 | 0 | **557** |
| **Total** | **9,209** | **3** | **1,003** | **2** | **2** | **10,219** |

# Attachment 2-14c

## Badger Meter Warranty

Badger Meter

# Lead-Free Bronze Disc Meters

## PRODUCTS COVERED

This warranty shall apply to all Recordall® Lead-Free Bronze Disc Meters, models LP through 170, when used to measure potable water, including the registers and encoders used with these meters (collectively "Product") sold on or after November 1, 2012. This warranty is extended only to utilities, municipalities, other commercial users and authorized Badger Meter, Inc. distributors, hereafter referred to as "Customer" and does NOT apply to consumers or any person or entity who is not an original customer of Badger Meter or its authorized distributors.

## MATERIALS AND WORKMANSHIP

Badger Meter warrants Product to be free from defects in materials and workmanship appearing within the following time frames and those listed in the table below:

**Housings**
Twenty-five (25) years and six (6) months after shipment from Badger Meter.

**Local Registers Supplied with the Meters Listed Herein**
Twenty-five (25) years and six (6) months after shipment from Badger Meter.

| | AWWA New Meter Accuracy | AWWA Repaired Meter Accuracy (AWWA M6 Manual) | Badger Meter Extended Low Flow Meter Accuracy |
|---|---|---|---|
| **Recordall Meter Model, Size** | *The meter product will meet or exceed new meter accuracy standards set forth in AWWA Standard C700 for the following periods:* | *The meter product will meet or exceed repaired meter accuracy standards set forth in AWWA Manual M-6, Chapter 5, Table 5.3 for the following periods:* | *Badger Meter further warrants the meter product to meet or exceed the following extended low flow accuracies in excess of AWWA standard:* |
| **Model LP, 5/8" and 5/8" x 3/4"** | Five (5) years from date of shipment or registration of 750,000 gallons, whichever occurs first. | Fifteen (15) years from date of shipment or registration of 2,500,000 gallons, whichever occurs first, with a 20 gpm safe maximum operating capacity and a 10 gpm maximum rate for continuous operation. | Badger Meter warrants Product low flow accuracy of 95% at a rate of 1/4 gpm for five (5) years from date of shipment or registration of 675,000 gallons, whichever occurs first. |
| **Model 25, 5/8" and 5/8" x 3/4"** | Five (5) years from date of shipment or registration of 750,000 gallons, whichever occurs first. | Fifteen (15) years from date of shipment or registration of 2,500,000 gallons, whichever occurs first, with a 25 gpm safe maximum operating capacity and a 15 gpm maximum rate for continuous operation. | Badger Meter warrants Product low flow accuracy of 98.5% at a rate of 1/4 gpm and low flow accuracy of 95.0% at a rate of 1/8 gpm for five (5) years from date of shipment or registration of 675,000 gallons, whichever occurs first. |
| **Model 35, 3/4"** | Five (5) years from date of shipment or registration of 750,000 gallons, whichever occurs first. | Fifteen (15) years from date of shipment or registration of 2,500,000 gallons, whichever occurs first, with a 35 gpm safe maximum operating capacity and a 25 gpm maximum rate for continuous operation. | Badger Meter warrants Product low flow accuracy of 97% at a rate of 3/8 gpm for five (5) years from date of shipment or registration of 675,000 gallons, whichever occurs first. |
| **Model 55, 1"** | Five (5) years from date of shipment or registration of 1,000,000 gallons, whichever occurs first. | Fifteen (15) years from date of shipment or registration of 3,000,000 gallons, whichever occurs first, with a 55 gpm safe maximum operating capacity and a 40 gpm maximum rate for continuous operation. | Badger Meter warrants Product low flow accuracy of 95% at a rate of 1/2 gpm for three (3) years from date of shipment or registration of 575,000 gallons, whichever occurs first. |
| **Model 70, 1"** | Five (5) years from date of shipment or registration of 1,100,000 gallons, whichever occurs first. | Fifteen (15) years from date of shipment or registration of 3,250,000 gallons, whichever occurs first, with a 70 gpm safe maximum operating capacity and a 50 gpm maximum rate for continuous operation. | Badger Meter warrants Product low flow accuracy of 95% at a rate of 3/4 gpm for three (3) years from date of shipment or registration of 1,100,000 gallons, whichever occurs first. |
| **Model 120, 1-1/2"** | Two (2) years from date of shipment or registration of 1,600,000 gallons, whichever occurs first. | Fifteen (15) years from date of shipment or registration of 5,600,000 gallons, whichever occurs first, with a 120 gpm safe maximum operating capacity and a 80 gpm maximum rate for continuous operation. | Badger Meter warrants Product low flow accuracy of 95% at a rate of 1-1/4 gpm for two (2) years from date of shipment or registration of 1,440,000 gallons, whichever occurs first. |
| **Model 170, 2"** | Two (2) years from date of shipment or registration of 2,100,000 gallons, whichever occurs first. | Fifteen (15) years from date of shipment or registration of 10,400,000 gallons, whichever occurs first, with a 170 gpm safe maximum operating capacity and a 100 gpm maximum rate for continuous operation. | Badger Meter warrants Product low flow accuracy of 95% at a rate of 1-1/2 gpm for two (2) years from date of shipment or registration of 1,890,000 gallons, whichever occurs first. |

## PRODUCT RETURNS

Any Product proved to the satisfaction of Badger Meter to have failed the foregoing warranties will, at the option of Badger Meter, be repaired or replaced without charge to the Customer. The obligation hereunder of Badger Meter shall be limited to such repair and replacement and shall be conditioned upon Badger Meter receiving written notice of any alleged defect within ten (10) days after its discovery. This exclusive remedy shall not be deemed to have failed its essential purpose so long as Badger Meter is willing and able to replace defective products or issue a credit to purchaser within a reasonable time of proof to Badger Meter that a defect is involved. Product returns must be shipped by the Customer prepaid F.O.B. to the nearest Badger Meter factory or distribution center. The Customer shall be responsible for all direct and indirect costs associated with removing original product and reinstalling the repaired or replacement Product.

## LIMITS OF LIABILITY

This warranty shall not apply to Product repaired or altered by any party other than Badger Meter. The foregoing warranty applies only to the extent that the Product is installed, serviced and operated strictly in accordance with AWWA Standard C700 and AWWA M6 Manual. The warranty shall not apply and shall be void with respect to Product exposed to conditions other than those detailed in Badger Meter Product technical literature and Installation and Operation Manuals (IOMs), or which have been subject to vandalism, negligence, accident, acts of God, improper installation, operation or repair, alteration, or other circumstances which are beyond the reasonable control of Badger Meter. With respect to Product not manufactured by Badger Meter, the warranty obligations of Badger Meter shall in all respects conform and be limited to the warranty extended to Badger Meter by the supplier.

**THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (except warranties of title).**

Any description of the Product, whether in writing or made orally by Badger Meter or Badger Meter agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets or similar materials used in connection with any Customer's order are for the sole purpose of identifying the Product and shall not be construed as an express warranty. Any suggestions by Badger Meter or Badger Meter agents regarding use, application, or suitability of the Product shall not be construed as an express warranty unless confirmed to be such in writing by Badger Meter.

**Exclusion of Consequential Damages and Disclaimer of Other Liability**. The liability of Badger Meter with respect to breaches of the foregoing warranty shall be limited as stated herein. The liability of Badger Meter shall in no event exceed the contract price. **BADGER METER SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY, (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY BADGER METER, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL, AND CONTINGENT DAMAGES WHATSOEVER**.

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**www.badgermeter.com**

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**WARREN COUNTY WATER DISTRICT**

**Case No. 2024-00200**
**Response to Commission Staff's Second Request for Information**

**Question No. 2-15**

**Responding Witness: Jeff Peeples**

**Q 2-15. Refer to Application, Exhibit 11, Line 45 and Application, Exhibit 8, page 4, Adjustment I.**

**a. Explain what Warren District's plan is for replacing failing meters.**

**b. State whether Warren District plans to replace any failing meters with upgraded metering technology. If so, explain what those plans are.**

**c. State why Warren District plans to replace 5,948 meters.**

**d. Provide how many of the 5,948 meters are Badger Meters.**

A 2-15.

2-15a. Warren District will issue Requests for Proposals ("RFP") for the purchase of replacement meters, the removal of failing meters, and the installation of replacement meters.

2-15b. Yes, Warren District currently plans to replace failing meters with ultrasonic meters. These meters are becoming an industry standard and provide improved accuracy and lower maintenance. The District has installed small quantities of ultrasonic meters from

various manufacturers and the District is monitoring the performance of these meters.

2-15c. The District plans to replace 5,948 meters due to the age of these meters. The aged meters include (1) Badger M25 Size 5/8-inch meters that have reached the end of their ten-year useful life, (2) Badger Size 1-inch meters that have reached ten years of age and are due for testing, and (3) Sensus SRII Size 5/8-inch meters that have reached the end of their twenty-one-year useful life.

2-15d. The number of Badger meters planned for replacement totals 5,399. A breakdown of the meter types and quantities planned for replacement is below:

| **Meter Type** | **Quantity** |
|---|---|
| Badger M25 5/8" | 5,235 |
| Badger 1" | 164 |
| Sensus SRII 5/8" | 549 |
| **Total** | **5,948** |

# WARREN COUNTY WATER DISTRICT

## Case No. 2024-00200
## Response to Commission Staff's Second Request for Information

## Question No. 2-16

## Responding Witness: Jeff Peeples

**Q 2-16. Refer to Case No. 2024-00061, Butler County Water System, Inc's (Butler County Water) Response to Commission Staff's Third Request for Information, Item 3.**

**a. Explain whether similarly to Butler County Water, Badger M25 Size 5/8-inch meters that are approaching 10 years of service would likely be replaced under a 15-year warranty. If so, explain what effect this replacement would have on the meters' useful lives.**

**b. Provide copies of documentation of any requests Warren District has made regarding the replacing of the Badger M25 Size 5/8-inch meters pursuant to the 15- year warranty.**

**c. Provide any information regarding Warren District's success at replacing Badger M25 Size 5/8 Meters under warranty.**

**d. For all non-Badger meters, explain whether Warren District believes that a 20-year service life is still appropriate. If not, explain why not, and identify what service life would be more appropriate.**

**e. State whether Warren District believes that setting all meters at a 15-year useful life in a depreciation schedule would be reasonable. If not, explain why not.**

**f. Provide the failure rate for all non-Badger meters for the period of 2018 to present, including the inputs used to determine the calculation.**

A 2-16.

2-16a. The Badger M25 Size 5/8-inch meters installed in Warren District are the same meter type installed in Butler County Water System and Simpson County Water District. Badger M25 Size 5/8-inch meters that failed accuracy tests were pulled from all three water systems.

It is unlikely that Badger M25 meters will be replaced under the fifteen-year warranty based upon communications with Badger Meter representatives. On May 1, 2023, the District submitted a warranty claim to Badger Meter with a sample of six meters that failed accuracy tests. Badger's case analysis report, attached as **Attachment 2-16a**, confirmed the accuracy failures.

Nevertheless, a letter dated December 12, 2023 from Badger's legal counsel explained that the warranty claim was denied based upon the following language in the warranty:

> *"This warranty shall not apply to Product repaired or altered by any party other than Badger Meter. The foregoing warranty applies only to the extent that the Product is installed, serviced, and operated strictly in accordance with AWWA Standard C700 and AWWA M6 Manual. The warranty shall not apply and shall be void with respect to Product exposed to conditions other that those detailed in Badger Meter Product technical literature and Installation and Operation Manuals*

> *(IOMs), or which have been subject to vandalism, negligence, accident, acts of God, improper installation, operation or repair, alteration, or other circumstances which are beyond the reasonable control of Badger."*

Sample testing of the Badger M25 meters indicates that a significant number of meters approaching ten years of service fail accuracy standards. Warren District presently anticipates that any meter submitted to Badger for accuracy failures as a warranty claim will be denied based upon Badger's interpretation of the warranty language stated above.

2-16b. In March 2023, the District began removing Badger M25 meters that had been in service for ten years for testing. The accuracy testing of forty-eight (48) meters resulted in thirty-one (31) of the samples failing AWWA meter accuracy standards. On April 6, 2023, the District notified Badger of the accuracy failures and at the request of Badger, the District shipped six (6) failed meters to Badger testing facilities on May 1, 2023. See **Attachment 2-16b** for the Return Material Authorization (RMA) form submitted by the District to Badger.

2-16c. No progress has been made towards replacing Badger M25 meters under warranty that fail accuracy testing. On June 8, 2023, Badger

Meter representatives first notified Warren District that the six failed meters submitted to Badger would not be covered under warranty. On November 16, 2023, the attorney representing Warren County Water District, Simpson County Water District, and Butler County Water System in the matter notified Badger Meter of their breach of warranty. This notification letter is attached as **Attachment 2-16c**. On December 12, 2023, the District's attorney received a letter from Badger Meter legal counsel stating, "Badger Meter is under no obligation to provide warranty replacement or repair for the six meters."

Warren County Water District, Simpson County Water District, and Butler County Water System are pursuing litigation against Badger Meter for their refusal to replace failing meters in accordance with the meter warranty. Management staff anticipates the litigation could extend over a considerable period of time with an outcome that is currently unknown.

2-16d. Random sample testing performed annually shows most SRII meters maintain accuracy standards and experience low failure rates. Over a ten-year period from 2014 to 2023, the District tested a sample of

950 SRII meters that were twenty-one (21) years old. Within the sample, 898 meters passed accuracy testing (94.53%), and 52 meters failed (5.47%). Based upon these test results, a twenty-year service life is still appropriate.

2-16e. Since test data reflects a ten-year service life for Badger M25 meters and a twenty-one-year service life for Sensus SRII meters, Warren District believes setting these meters to a fifteen-year useful life in a depreciation schedule would not be reasonable. For the Badger M25, test data indicates a significant number of meters will fail around ten years of age. If a fifteen-year useful life is applied, meters failing at ten years will have residual book values. In that circumstance, Warren District would be required to write off the residual value and record a disposition loss as Badger M25 meters are removed from service.

For Kamstrup and Master Meter ultrasonic meters, each has a ten-year full replacement warranty and ten-year prorated warranty. For these meters, a ten-year useful life that corresponds with the ten-year full warranty replacement is appropriate.

2-16f. The requested information regarding failure rates of non-Badger meters is included in the chart below:

ANNUAL SAMPLE TESTS
METER TESTING OF 21 YEAR OLD SENSUS SRII
WARREN, BUTLER, SIMPSON WATER DISTRICTS

| **Year Tested** | **No. Meters Tested** | **Meters Passed** | **Meters Failed** | **% Failed Accuracy** |
|---|---|---|---|---|
| 2014 | 95 | 87 | 8 | 8.42% |
| 2015 | 95 | 92 | 3 | 3.16% |
| 2016 | 95 | 87 | 8 | 8.42% |
| 2017 | 95 | 89 | 6 | 6.32% |
| 2018 | 95 | 89 | 6 | 6.32% |
| 2019 | 95 | 90 | 5 | 5.26% |
| 2020 | 95 | 82 | 13 | 13.68% |
| 2021 | 95 | 94 | 1 | 1.05% |
| 2022 | 95 | 94 | 1 | 1.05% |
| 2023 | 95 | 94 | 1 | 1.05% |
| **Total** | **950** | **898** | **52** | **5.47%** |

# Attachment 2-16a

## Badger Case Analysis Report

# Case Analysis Report

As of 2023-05-16 08:26:52 Central Standard Time/CST • Generated by Greg Olson

**Filtered By**
Show: All cases
Case ID equals 5003t00001gbRQK

| Yom-Result ↑ | Item Number: Product Name ↑ | | Case Number | Freeform Description | Primary Issue | Analysis Detail | Analysis Notes | ReplacementQty |
|---|---|---|---|---|---|---|---|---|
| 1W - STD Warranty-2013 | 1PART-AC | | 00640836 | M25 / 5/8" x ¾" LL Meter Bare (LCD) | Failed to meet accy test spec | | 1/4gpm=101% 1gpm=102.7% 25gpm=99.1% | |
| | | | 00640836 | M25 / 5/8" x ¾" LL Meter Bare (LCD) | Failed to meet accy test spec | | 1/4gpm=97% 1gpm=101.1% 25gpm=98.9% | |
| | | | 00640836 | M25 / 5/8" x ¾" LL Meter Bare (LCD) | Failed to meet accy test spec | | 1/4gpm=100.2% 1gpm=101.9% 25gpm=99.3% | |
| | | | 00640836 | M25 / 5/8" x ¾" LL Meter Bare (LCD) | Failed to meet accy test spec | | 1/4gpm=100% 1gpm=102.7% 25gpm=98.6% | |
| | | | 00640836 | M25 / 5/8" x ¾" LL Meter Bare (LCD) | Failed to meet accy test spec | | 1/4gpm=90.1% 1gpm=101.7% 25gpm=99.4% | |
| | | | 00640836 | M25 / 5/8" x ¾" LL Meter Bare (LCD) | Failed to meet accy test spec | | 1/4gpm=90.8% 1gpm=101.7% 25gpm=98.4% | |
| | **Subtotal** | Count | 6 | | | | | 6 |
| **Subtotal** | | Count | 6 | | | | | 6 |
| 1W - STD Warranty-2019 | 1PART-NL | | 00640836 | M25 / HR-E LCD w/5' Lead & Itron Connector | Tested good, no problem found | | Replaced per marketing agreement. | |
| | **Subtotal** | Count | 1 | | | | | 1 |
| **Subtotal** | | Count | 1 | | | | | 1 |
| 1W - STD Warranty-2022 | 1PART-NL | | 00640836 | M25 / HR-E LCD w/5' Lead & Itron Connector | Tested good, no problem found | | Replaced per marketing agreement. | |
| | | | 00640836 | M25 / HR-E LCD w/5' Lead & Itron Connector | Tested good, no problem found | | Replaced per marketing agreement. | |
| | | | 00640836 | M25 / HR-E LCD w/5' Lead & Itron Connector | Tested good, no problem found | | Replaced per marketing agreement. | |
| | | | 00640836 | M25 / HR-E LCD w/5' Lead & Itron Connector | Tested good, no problem found | | Replaced per marketing agreement. | |
| | | | 00640836 | M25 / HR-E LCD w/5' Lead & Itron Connector | Tested good, no problem found | | Replaced per marketing agreement. | |
| | **Subtotal** | Count | 5 | | | | | 5 |
| **Subtotal** | | Count | 5 | | | | | 5 |
| **Total** | | Count | 12 | | | | | 12 |

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# Attachment 2-16b

## Badger Warranty Replacement Request

Badger Meter

# Return Material Authorization (RMA) Form

## RMA Request Form Requirements

**All fields must be completed to issue the RMA**

- **Return Shipping Address:** Identify the physical address where product will be shipped once an evaluation has been completed by Badger Meter.
- **Product Table:** Use separate rows for each item. To add a row, click in the bottom row of the table in the "Loaner Needed" column and press the Tab key.
- **Description of Product:** List all model numbers
- **Serial Number:** List all product serial numbers.
- **Reason for Return:** To better serve you and expedite repairs, please list as much information and be as specific as possible.
- **Loaner Needed:** (MRT Products Only) Indicate if a loaner will be needed while repairs are completed.
- **Endpoint Disposal Only:** Indicate disposal option for non-warranty endpoints.
- **MRT Returns Only:** All MRT product returned to Badger Meter without an Active Service Agreement will be assessed a $200 evaluation fee. Upon receipt of a PO, repairs will be completed according to estimate.

**For questions or general troubleshooting, contact Badger Meter Technical Support at:**

- **1-800-616-3837** (Press #2 for Technical Support)
- t@badgermeter.com

**Date:04/20/2023**

## Returned By Contact Info

**Company Name:** Warren, Butler, and, Simpson County Water Districts

**Contact Name (First & Last):** Jeff Peeples

**Phone Number:**

**E-mail:**

## End Customer Contact Info (If Different Than Returned By)

**Utility/End Customer Name:**

**Contact Name (First & Last):**

## Return Shipping Address

**Street Address:** 523 U.S. Highway 31-W Bypass

| | |
|---|---|
| **City:** Bowling Green | **State:** KY |
| **Country:** USA | **Zip Code/Postal Code:** 42102 |

Badger Meter

# Return Material Authorization (RMA) Form

| Qty | Description of Product | Serial Number | Detailed Reason for Return | Loaner Needed (MRT Products Only) |
|---|---|---|---|---|
| 1 | M25 HRE LCD | 45453510 | Failed Accuracy Test | |
| 1 | " | 45453319 | " | |
| 1 | " | 45132440 | " | |
| 1 | " | 45568760 | " | |
| 1 | " | 45701142 | " | |
| 1 | " | 45568768 | " | |
| | | | | |
| | | | | |
| | | | | |

***Endpoint Disposal—Select One**

○ **Standard Processing—S3.75/Unit**
Badger Meter to dispose of endpoints

○ **Return to Customer—Applicable Shipping Fees Apply**
Badger Meter to dispose of endpoints

**Submit this Form to by Email to:** [redacted]**@badgermeter.com**

**A lithium Thionyl Chloride Battery Handling and Recycling Document (INC-SG-01144-EN) is available by request for more details about endpoints containing lithium batteries not found to be covered under warranty. Submittal of a RMA Request form constitutes acceptance of this policy.

# Attachment 2-16c

## Demand Letter to Badger

**COLE & MOORE, P.S.C.**

ATTORNEYS AT LAW

921 COLLEGE STREET - PHOENIX PLACE

POST OFFICE BOX 10240

BOWLING GREEN, KENTUCKY 42102-7240

JOHN DAVID COLE
FRANK HAMPTON MOORE, JR.
FRANK HAMPTON MOORE, III

FRANK R. GOAD
(1915-2005)

TELEPHONE 270-782-6666
FACSIMILE 270-782-8666
www.coleandmoore.com

November 16, 2023

Badger Meter
4545 West Brown Deer Road
PO Box 245036
Milwaukee, WI 53244-9536

RE: Warren County (KY) Water District
Simpson County (KY) Water District
Butler County (KY) Water District
Case No. 640836

This firm represents Warren County Water District, Simpson County Water District, and Butler County Water System in connection with its warranty, contract, and negligence claim against Badger Meter for meter failure and test results. Notification of this claim was given by Warren Water on April 6, 2023 and acknowledged by Badger's representative, Ron Lilley, on April 11, 2023. On April 26, 2023 Ron Lilley from Badger was on site at the District's meter test facility, met with water test professionals and evaluated the test facilities' equipment, certification, meter testing process, and meter test results. At the request of Badger, on May 1, 2023, six (6) water meters that had failed the accuracy testing were shipped from the District's test facilities to Badger testing facilities.

On May 12, 2023, Badger acknowledged that all six (6) of the submitted meters failed to meet accuracy test specifications.

On June 8, 2023, Badger communicated its evaluation as follows:

> "In reviewing the meters, 5/8 x 3/4, M25 with plastic bottom there were a few observations that would drive the poor accuracy performance. One, there was a level of scoring that could be seen that would affect the design tolerances of the disc outer diameter and chamber radial bore. This scoring and rubbing creates additional friction and loss in low flow performance. Secondly, there is a white film (possibly calcium?) that is visible in the measuring surfaces of the positive displacement chamber and disc. This white film will increase surface thickness, reduce internal volume, and cause the meter to over register as seen on the mild flow.

> Badger further stated since the calcium film is due to the District's water quality, the meters would not be covered under warranty. (See attached Ref6 Badger Meter Warranty – Lead Free Bron Disc Meters). The District requested that Badger provide water quality thresholds for hardness/calcium, which would negate Badger honoring the warranty for the M25 meters in questions."

Notwithstanding the June 8, 2023 evaluation results communicated by Badger and quoted above, on June 23, 2023, through its Regional Manager Colin Middaugh, retracted the June 8th evaluation and substituted another explanation for the testing failure:

> "Mr. Peeples, We apologize for the confusion that our response has caused. The concern impacting the returned meters is tied to water chemistry, not water quality. It is understood that water chemistry is different from location to location and is affected by multiple factors outside of our control. Because of the fluctuating chemistry that may exist at different times within a water system, we are unable to provide a standard for our customers. We apologize for the confusion and will return one of the meters for your evaluation. Regards, Colin Middaugh"

Warren Water rejects each of the alternative test failure theories provided by Badger.

Specifically,:

a. Meter accuracy typically decreases with age. The accuracy results of the several Badger meters resulted in high accuracy results which negatively affects the customer's cost of water service.
b. The "scoring" is due to rotation of the chamber as water passes through the meter and reflects the mechanical design of the meter.
c. The "film" on the meter chamber is not calcium. The "film" is a discoloration of the plastic chamber that occurs from chlorinated water passing through the meter. The discoloration is only visible when the chamber dries, and the District has found no increase in surface thickness from calcium buildup.
d. The M25 meters that failed accuracy testing were installed in three separate distribution systems: Warren, Butler, and Simpson. Each system has a different source water, BGMU (Barren River), Butler WTP (Green River) and WHUD (Old Hickory Lake).
e. Sensus SRII meters pulled from all three-distribution systems continue to test within accuracy standards.

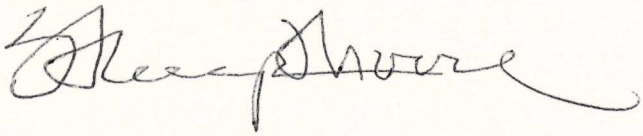
Consequently, I reiterate the warranty claim provided to Badger on April 6, 2023. Additionally, I submit the meter failures described herein constitute a contract breach by Badger Meter in connection with the contract for purchase, sale and delivery of the Badger Meters. Moreover, my client reiterates its belief that the meter testing failures described herein result from negligent design, manufacture and assembly by Badger as described with specificity in this correspondence.

My client would like to resolve this claim without litigation. However, if a method for alternate dispute resolution cannot be agreed upon immediately, Badger will leave my client no choice but to seek its remedy for these meter failures in the courts of the Commonwealth of Kentucky.

Please acknowledge receipt of this correspondence and your proposal for resolution of this dispute.

Very truly yours,

COLE & MOORE, P.S.C.



Frank Hampton Moore, Jr.

FHMJR/jdh

Cc: Jacob Cuarta
Colin Middaugh