

Exhibit No.	
Issues:	AMI
Witness:	Andre Noel
Type of Exhibit:	Surrebuttal Testimony
Sponsoring Party:	The Raytown Water Company
File No.:	WR-2023-0344
Date:	November 8, 2023

Missouri Public Service Commission

Surrebuttal Testimony

of

Andre Noel

On Behalf of

The Raytown Water Company

November 8, 2023

Table of Contents

I. WITNESS INTRODUCTION 1
II. PURPOSE..... 2
III. AMI..... 3

**SURREBUTTAL TESTIMONY OF
ANDRE NOEL
ON BEHALF OF THE RAYTOWN WATER COMPANY**

1 **I. WITNESS INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Andre Noel. My business address is 1230 Peachtree St. NE, Atlanta,
4 GA 30309.

5 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

6 A. I am the Director of Revenue Management & Metering Services of USG Water
7 Solutions (USCI).

8 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING?**

9 A. I am testifying at the request of The Raytown Water Company (“Raytown Water”
10 or “Company”), on behalf of USG Water Solutions (USCI).

11 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL
12 EXPERIENCE.**

13 A. I have a degree in Instrumentation & Control Engineering Technology (ICET) and
14 a Master of Business Administration (MBA) degree. I have held many technical
15 and management positions for one of the largest manufacturers of water meters
16 and advanced meter reading systems for 23 years. Please see my attached
17 resume (**Schedule AN-1-S**) for further detail.

18 **Q. PLEASE BRIEFLY DESCRIBE USG.**

19 A. USG is a provider of Water Asset Management Solutions and Services to the water
20 industry. As the leading provider of asset maintenance and rehabilitation services

1 for the municipal water industry in the United States, USG has a staff of technical
2 experts and a comprehensive portfolio of technologies that allow us to design and
3 deliver value-based, sustainable and compliant results for any component of a
4 water or wastewater system. USG can meet the maintenance needs of an entire
5 system infrastructure from storage tanks and pipe networks to treatment plants
6 and metering systems. USG employs over 600 experienced professionals who
7 work collaboratively to design and deliver the right solution for rehabilitation and
8 maintenance projects. In addition to 130 field crews, our staff includes six (6)
9 professional engineers, eighty (80) NACE certified inspectors, over forty (40)
10 SSPC certified inspectors and 10 subject matter experts, each specialized in a
11 particular service offering—steel and concrete storage tanks, concrete
12 infrastructure, water quality, treatment plant asset operations, pipes and metering
13 systems.

14
15 **II. PURPOSE**

16 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY IN THIS**
17 **CASE?**

18 A. The purpose of my surrebuttal testimony is to respond to certain aspects of the
19 Rebuttal Testimony of Office of the Public Counsel (“OPC”) witness Geoff Marke
20 as it relates to Raytown Water’s investment in Advanced Metering Infrastructure
21 (“AMI”).

1 **III. AMI**

2 **Q. ARE YOU FAMILIAR WITH THE AMI PROJECT UNDERTAKEN BY RAYTOWN**
3 **WATER?**

4 A. Yes.

5 **Q. HOW ARE YOU FAMILIAR WITH THAT PROJECT?**

6 A. I am part of the USG Team that selected and recommended the AMI solution to
7 Raytown Water.

8 **Q. OPC WITNESS MARKE REFERS TO THE AMI METER HARDWARE AND**
9 **SUPPORTING SOFTWARE INSTALLED BY RAYTOWN WATER AS “GOLD-**
10 **PLATED.” (MARKE REB., P. 5) WOULD YOU REFER TO IT IN THAT**
11 **FASHION?**

12 A. No. I believe the AMI hardware and supporting software purchased by the
13 Company has a proven track record of reliability and quality. However, I would not
14 classify it as “gold-plated.”

15 **Q. AT A HIGH LEVEL, WHAT AMI METER HARDWARE AND SUPPORTING**
16 **SOFTWARE WAS INSTALLED BY RAYTOWN WATER?**

17 A. **Neptune Technology Group:** Mechanical Water Meters.

18 **Aclara Technologies:** AclaraONE Software, Endpoints, Data Collector Units.

19 **USG:** Project Management, Billing Integrations, Customer Portal, Asset
20 Maintenance Program.

21 **Q. HOW WAS THAT AMI METER HARDWARE AND SUPPORTING SOFTWARE**
22 **CHOSEN FOR RAYTOWN WATER?**

1 A. The water meter selection was based on the manufacturer and technology that
2 was currently installed as the water meters had a proven track record within
3 Raytown Water.

4 The AMI Hardware and supporting software was selected based on a review of
5 AMI systems currently available and working with Raytown Water to select the best
6 AMI system for them.

7 To ensure the appropriate equipment was installed – a propagation study was
8 performed to meet the performance guarantee of 98.5% reads over a three-day
9 period. No unnecessary equipment was installed.

10 **Q. WHAT IS A PROPAGATION STUDY?**

11 A. A propagation study is an evaluation that is conducted by the AMI manufacturer to
12 plan the layout of the wireless network to ensure optimal performance. It
13 determines the amount of AMI infrastructure required to provide full meter reading
14 coverage of Raytown Water's water meters.

15 **Q. WHAT IS THE IMPORTANCE OF ACHIEVING 98.5% READS OVER A THREE-**
16 **DAY PERIOD?**

17 A. This is the minimum standard of performance for an AMI system.

18 **Q. IS THERE ANYTHING OUT OF THE ORDINARY IN REGARD OF THE**
19 **HARDWARE THAT WAS INSTALLED?**

20 A. No.

21 **Q. IS THIS TYPE OF AMI SYSTEM COMMONLY USED IN OTHER SMALL WATER**
22 **UTILITIES?**

1 A. Yes. There are hundreds of small municipal water utilities across the country,
2 including in Missouri, that have deployed AMI, resulting in benefits for both the
3 utilities and their customers.

4 **Q. DR. MARKE REFERS TO RAYTOWN WATER’S TERRITORY AS “THE**
5 **DENSELY POPULATED SMALL CITY OF RAYTOWN.” (MARKE REB., P. 4)**
6 **ASSUMING FOR PURPOSES OF THIS QUESTION THAT RAYTOWN IS**
7 **“DENSELY POPULATED,” IS THERE ANY REASON THAT DEPLOYMENT OF**
8 **AMI IS NOT APPROPRIATE OR BENEFICIAL TO THE CUSTOMERS AND THE**
9 **COMPANY IN THAT CIRCUMSTANCE?**

10 A. No. The benefits of AMI extend to all customers and companies regardless of the
11 density of the population.

12 **Q. DR. MARKE SUGGESTS THAT “O&M EXPENSE WILL ACTUALLY INCREASE**
13 **FROM THIS CAPITAL PROJECT AS THE COMPANY IS PROJECTED TO**
14 **INCUR AT LEAST \$100,000 IN ANNUAL MAINTENANCE EXPENSE THAT IS**
15 **EXPECTED TO ESCALATE ANNUALLY.” (MARKE REB., P. 4) WHAT IS THE**
16 **ANNUAL MAINTENANCE FEE?**

17 A. The Maintenance Program (“MP”) fees are divided into three components. The
18 first part is for the annual recurring fees for hosting and supporting the software,
19 maintaining the data collectors, and providing the cellular backhaul from the
20 collectors to the head end software. These are standard costs required to operate
21 an AMI system. The second part is for field maintenance of all the meters and
22 transmitters. When any device fails in the system, a work order is created for that

1 device. When sufficient workorders exist to warrant a field maintenance visit, USG
2 Water Solutions (“USCI”) dispatches a field technician from our service center to
3 travel to Raytown to perform the needed repairs. The third part is for USCI to
4 monitor, manage, and maintain the system. The system is monitored daily to
5 assure that it is operating correctly. USCI also monitors the system to see if there
6 are any significant consumption issues on the part of Raytown Water’s customers
7 (constant consumption, continuous consumption, abnormal consumption). Any
8 significant consumption issue is sent to the Company daily. This was not possible
9 with Raytown Water’s previous system.

10 **Q. DR. MARKE SUGGESTS THAT THE RESULT OF AMI IS THAT “CUSTOMERS**
11 **ARE NOW GOING TO PAY SIGNIFICANTLY MORE FOR A SERVICE THEY**
12 **HAVE TO PROACTIVELY ENGAGE IN, LOSING A SERVICE THAT WAS**
13 **PASSIVELY PROVIDED TO THEM.” (MARKE REB., P. 3) DO YOU AGREE**
14 **WITH THAT STATEMENT?**

15 A. No. Customers are going to have a service where they will be proactively alerted
16 to any unusual water activity that occurs at their property within days of the
17 occurrence, saving the customer from events such as a high-water bill, water
18 damage to property, illegal water use, or other similar problems.

19 I understand that the Company reviews billings on a monthly basis to look for
20 abnormal readings and send a letter to notify customers. In that scenario, leaks
21 and other abnormal situations can continue for 30-60 days before they are
22 discovered and conveyed to the customer. Customers will be able to see daily

1 water use. With the customer portal (if they opt-in), they will also receive
2 notifications of any unusual water activity, each saving the customer monetarily
3 and providing the opportunity for the customer to set up a water budget to monitor
4 and manage their water use.

5 Moreover, the Company will have access to hourly usage data to help investigate
6 and diagnose customer issues. This should provide a substantial improvement in
7 the timing of leak detection and correction.

8 Lastly, I would note that the monitoring, managing, and maintaining functions we
9 provide as part of our MP program, and the AMI itself, allows Raytown Water to
10 utilize existing personnel for other functions.

11 **Q. ARE THERE OTHER COMPANY BENEFITS THAT WILL RESULT FROM THE**
12 **DEPLOYMENT OF AMI?**

13 A. Yes. For the company, AMI will provide better timing and greater accuracy for
14 meter reads by eliminating the need for meter readers to put eyes on each meter
15 and by eliminating the human error necessarily associated with direct reads.

16 **Q. DR. MARKE ALLEGES THAT “THERE MAY BE FEWER ESTIMATED BILLS**
17 **DUE TO THE SIMPLE FACT THAT THESE ARE BRAND NEW METERS, BUT**
18 **ESTIMATED BILLS WILL NOT BE ELIMINATED. MY EXPERIENCE WITH AMI**
19 **AROUND ELECTRIC UTILITIES HAS SHOWN THAT ESTIMATED BILLS WILL**
20 **CONTINUE TO BE AN ISSUE INDEFINITELY (DUE TO LOSS OF POWER,**
21 **MALFUNCTIONS, ETC...)” (MARKE REB., P. 3) IS THAT CONSISTENT WITH**
22 **YOUR EXPERIENCE?**

1 A. Brand new water meters typically do not result in fewer estimated reads. Brand
2 new meters result in more accurate measurement of water usage. Unlike electric
3 utility systems, a water AMI system does not rely on electric power (it uses battery
4 and/or solar power). Therefore, there is no loss of power resulting in an estimated
5 bill. Furthermore, under the USG Maintenance Program, USG is responsible for
6 maintaining the AMI system and guaranteeing 98.5% of meter reads from
7 Raytown's water meter over a three-day period (no estimates) for up to fifteen (15)
8 years.

9 **Q. OPC WITNESS MARKE NOTES THE DIFFERENCE BETWEEN THE ORIGINAL**
10 **CONTRACT PRICE OF \$3,870,050 AND THE COMPANY'S CURRENT**
11 **ESTIMATE OF \$4,200,000. (MARKE REB., P. 2) WHAT IS THE REASON FOR**
12 **THAT DIFFERENCE?**

13 A. The difference between the current AMI estimated cost of \$4,200,000 and the
14 previous AMI cost of \$3,870,050 is partially due to inflation and supply issues,
15 which increased the contract amount by \$190,000.00 for the cost of meters, DCU
16 and construction materials.

17 Additional expenses include the cost of the meter expansion connectors, in the
18 sum of \$171,207.26, which increases the total for AMI to \$4,231,257.26.

19 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

20 A. Yes, it does.

VERIFICATION OF ANDRE NOEL

STATE OF GEORGIA)
)
COUNTY OF FULTON)

I, Andre Noel, of lawful age, under penalty of perjury, and pursuant to Section 509.030, RSMo, state as follows:

1. My name is Andre Noel. I am the **Director of Revenue Management and Metering Services for USG Water Solutions (USCI)**. My business address is **1230 Peachtree St. NE, Atlanta, GA 30309**.

2. My surrebuttal testimony on behalf of The Raytown Water Company is attached to this verification.

3. My answers to each question in the attached surrebuttal testimony are true and correct to the best of my knowledge, information, and belief.



Andre Noel

November 8, 2023
Date

ANDRE NOEL

DIRECTOR OF REVENUE MANAGEMENT & METERING SERVICES

YEARS OF EXPERIENCE

- 30 Years in the Water and Wastewater Industry
- Seven (7) Years in the Asset Maintenance Industry

EDUCATION

- M.B.A., Troy University.
- Instrumentation & Control (I&C) Engineering Technology, Lambton College.

AREAS OF SPECIALIZATION

- Subject Matter Expert (SME)
- Water Distribution
- Industrial, Commercial, and Institutional Metering
- Instrumentation, Process Control, and SCADA
- Advanced Metering Infrastructure (AMI)
- Automatic Meter Reading (AMR)
- Revenue Management
- Meter Testing/Troubleshooting
- Training

PROFESSIONAL CERTIFICATIONS

- American Water Works Association (AWWA)
- National Institute of Standards and Technology (NIST)
- National Type Evaluation Program (NTEP)
- Certified Engineering Technologist (CET)

PROFESSIONAL TRAINING

- Occupational Safety and Health Administration (OSHA)
- First Aid | CPR

OFFICE ADDRESS

- 1230 Peachtree St NE, Suite 1100, Atlanta, GA 30309



USG WATER
SOLUTIONS

KEY QUALIFICATIONS

Mr. Andre Noel serves as the Director of Revenue Management & Metering Services for USG Water Solutions. He is responsible for providing both oversight and resources to the Project Managers to ensure that each project is managed in a way that brings complete satisfaction and high-quality results to the client. Mr. Noel brings with him over 30 years of industrial, commercial, and residential metering experience from around the world—having worked for one (1) of the largest metering manufacturers in North America. He is also renowned as a leading specialist and technical expert in the selection, installation, testing, and troubleshooting of AMI/Metering products and services in water distribution. Mr. Noel specializes in supporting both municipal and industrial water system clients with a sense of urgency to accomplish tasks in a timely manner and meet established deadlines—ultimately providing specialized services in a method that will produce the high-quality results expected from our many valued clients. His extensive experience qualifies him to conduct the work associated with the requested services.

PROFESSIONAL EXPERIENCE

USG WATER SOLUTIONS

Director of Revenue Management & Metering Services **2019–Present**

- Lead business planning and strategy development
- Manage an entire service line life-cycle—strategic planning, P&S-products and services development, sales, service delivery, etc.
- Deliver revenue management services projects that involve CIS, Billing Metering / Smart Metering / Metering Services projects, coordinating all the activities developed by the project teams and other areas involved in the projects—such as sales and operations
- Execute sales / sales support activities—including the development of service proposals
- Manage pricing strategy and subcontractor proposals/pricing
- Manage relationships with partners—CIS, Billing Software Providers, AMI Technology Providers, Water Meter Manufacturers, etc.
- Technology, supply chain, and operations teams

Metering Services Product Manager **2016–2018**

- Subject Matter Expert (SME) in metering products and associated AMR/AMI technology
- Responsible for Product Development and Market Strategy for Smart Metering, AMI, AMR, and the Metering Services Line of Business—from sales to delivery
- Deliver Metering / Smart Metering projects; coordinated all activities developed by the project teams
- Manage, support, and provide resources to AMI/Metering Project Managers
- Ensure the quality of products and services supplied
- Responsible for regulatory compliance of projects
- Manage an entire service line life-cycle—strategic planning, P&S-products and services development, sales, service delivery, etc.