

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of the Application of a Rate) **File No. WR-2023-0344**
Increase of Raytown Water Company) Tracking No. JW-2024-0039

NOTICE OF LATE-FILED EXHIBIT 402

Issue Date: November 29, 2023

During the evidentiary hearing in the above captioned matter, the presiding officer undertook the submission of late-filed Exhibit 402. Exhibit 402 is the Suez Presentation from Raytown Water Company’s application filed in File No. WF-2021-0427.

Pursuant to the *Notice of Orders Issued During Evidentiary Hearing*, the presiding officer files Exhibit 402, attached.

BY THE COMMISSION



A handwritten signature in black ink that reads "Nancy Dippell".

Nancy Dippell
Secretary

Dated at Jefferson City, Missouri,
On the 29th day of November, 2023

Charles Hatcher, Senior Regulatory
Law Judge, by delegation of authority
pursuant to Section 386.240, RSMo 2016.

CONFIDENTIAL

AMI Metering Asset Management: Enhance Revenues and Deliver Superior Customer Service for Raytown Water Co, MO

Raytown Water Co Presentation with Pricing Proposal

Tom Stechmann
Water System Consultant

December 10th, 2020

ready for the resource revolution



EXHIBIT
A

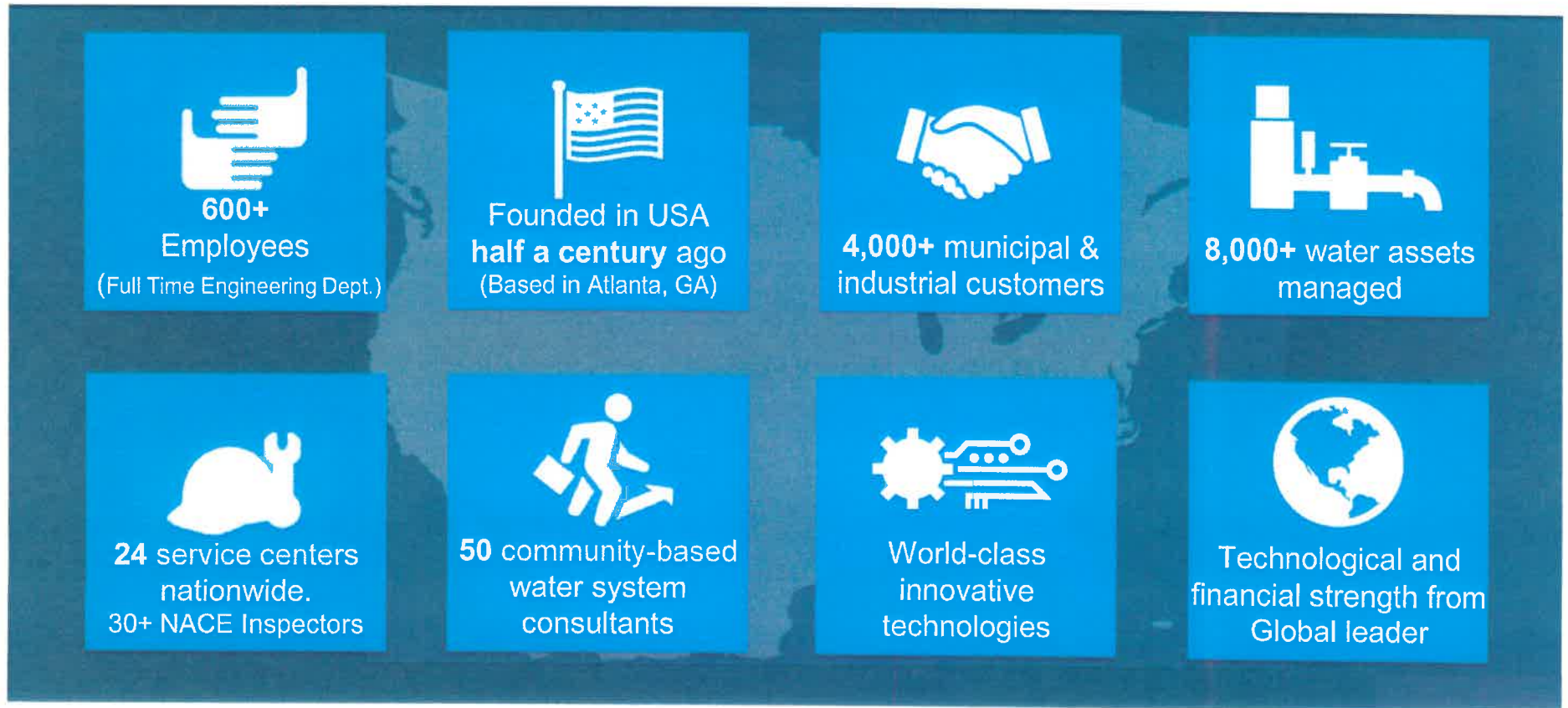
AMI Metering Asset Management Enhance Revenues & Deliver Superior Customer Service

Contents

- | SUEZ (USCI) Company Overview
- | Our Value Proposition - Asset Management & Maintenance Program
- | Benefits of AMI
- | AMI System Selection with Propagation Study
- | Proposal with Cost Justification
- | Asset Management with Maintenance Program
- | Case Studies
- | Next Steps and Conclusion

SUEZ Advanced Solutions

North American Leader in Water Asset Management Solutions



SUEZ Advanced Solutions Offerings & Asset Management / Maintenance Programs

Network assets & Meters



- Maintenance program with AMI
- Advanced Network management (Aquadvanced)
- Network condition assessment and rehabilitation

Steel Water Tanks



- Condition assessment
- Maintenance program
- Exterior and Interior Rehabilitation
- Emergency repairs (MP Programs)
- Drone inspections

Water Quality



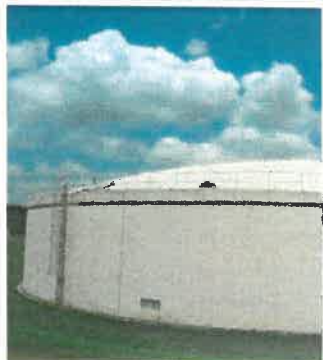
- Asset chemical cleaning
- Mixers
- THM removal
- Ice Pigging
- Filter media replacement

SIPP (Spray-In-Place Pipelining)



- Cost Effective Pipe Rehabilitation
- Structural Enhancement of Pipelines
- Reduces Risks of Future Leaks and Failures

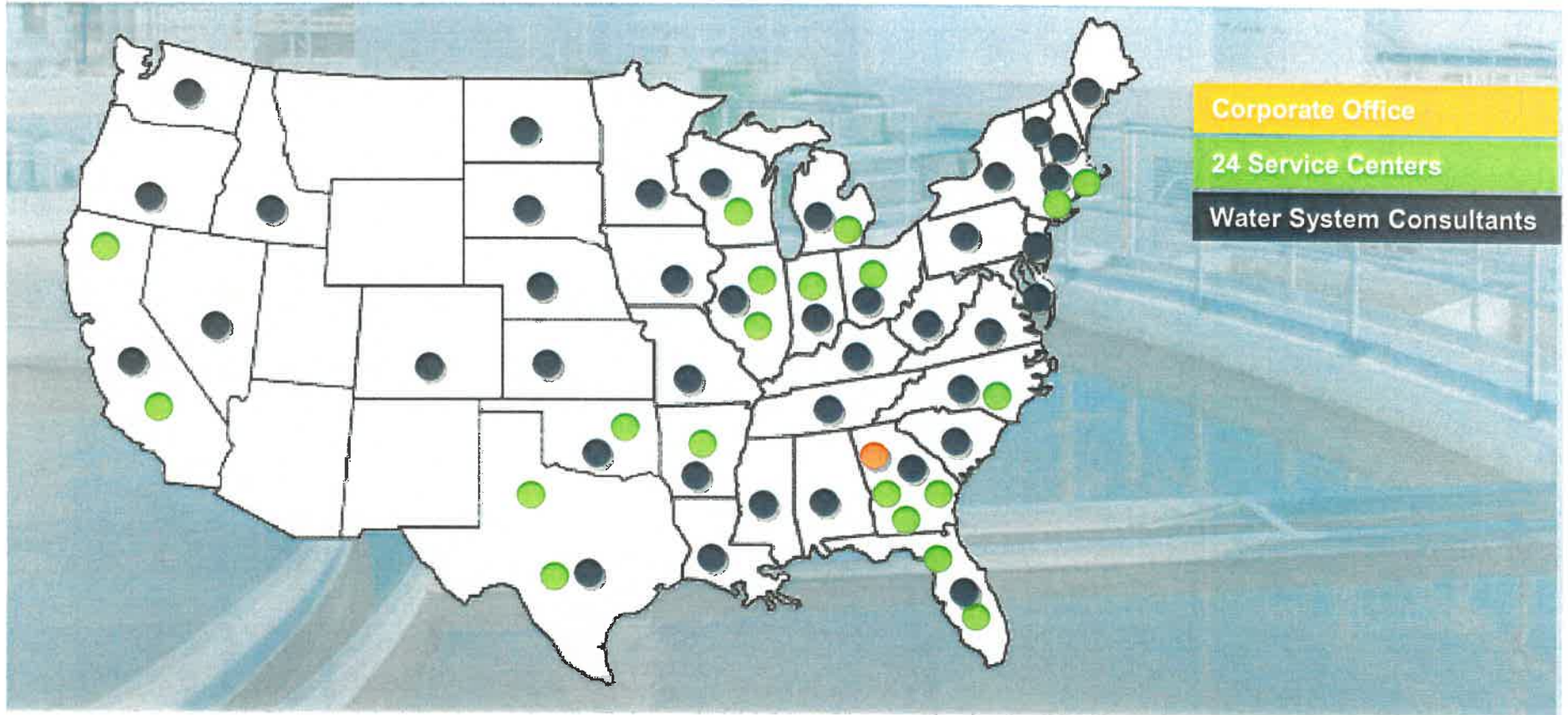
Concrete Structures



- Condition assessment
- Maintenance program
- Rehabilitation
- Water, wastewater and storm water assets

SUEZ Water Advanced Solutions

Experienced Problem Solvers Nationwide



AMI Metering Asset Management & Maintenance Program:

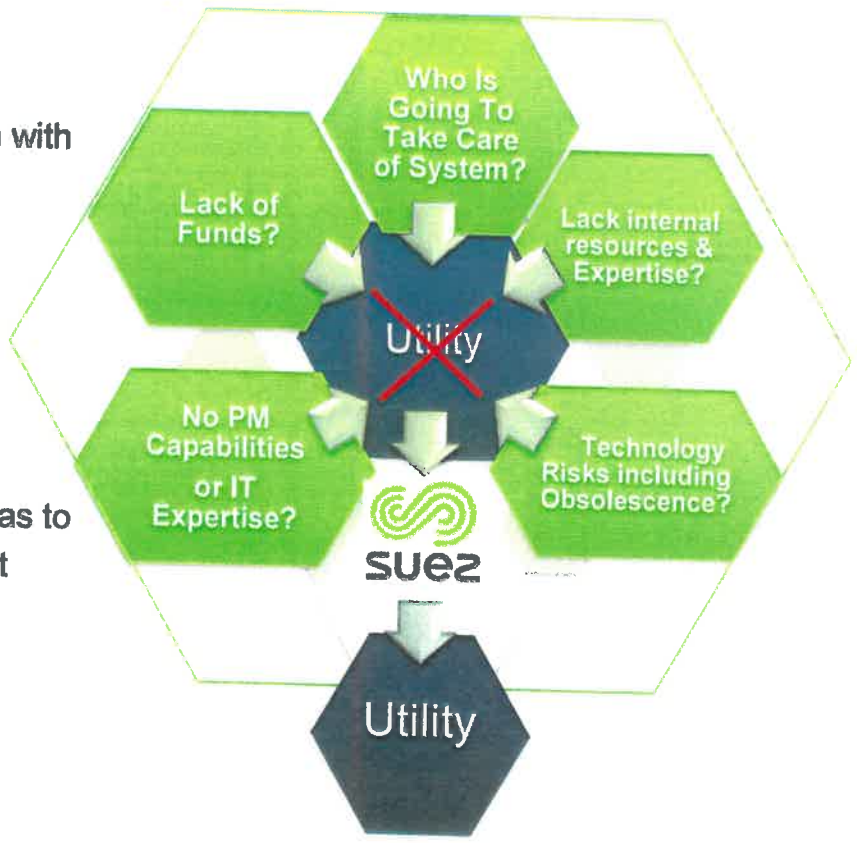
Value Proposition - Asset Management & Maintenance Program

ready for the resource revolution



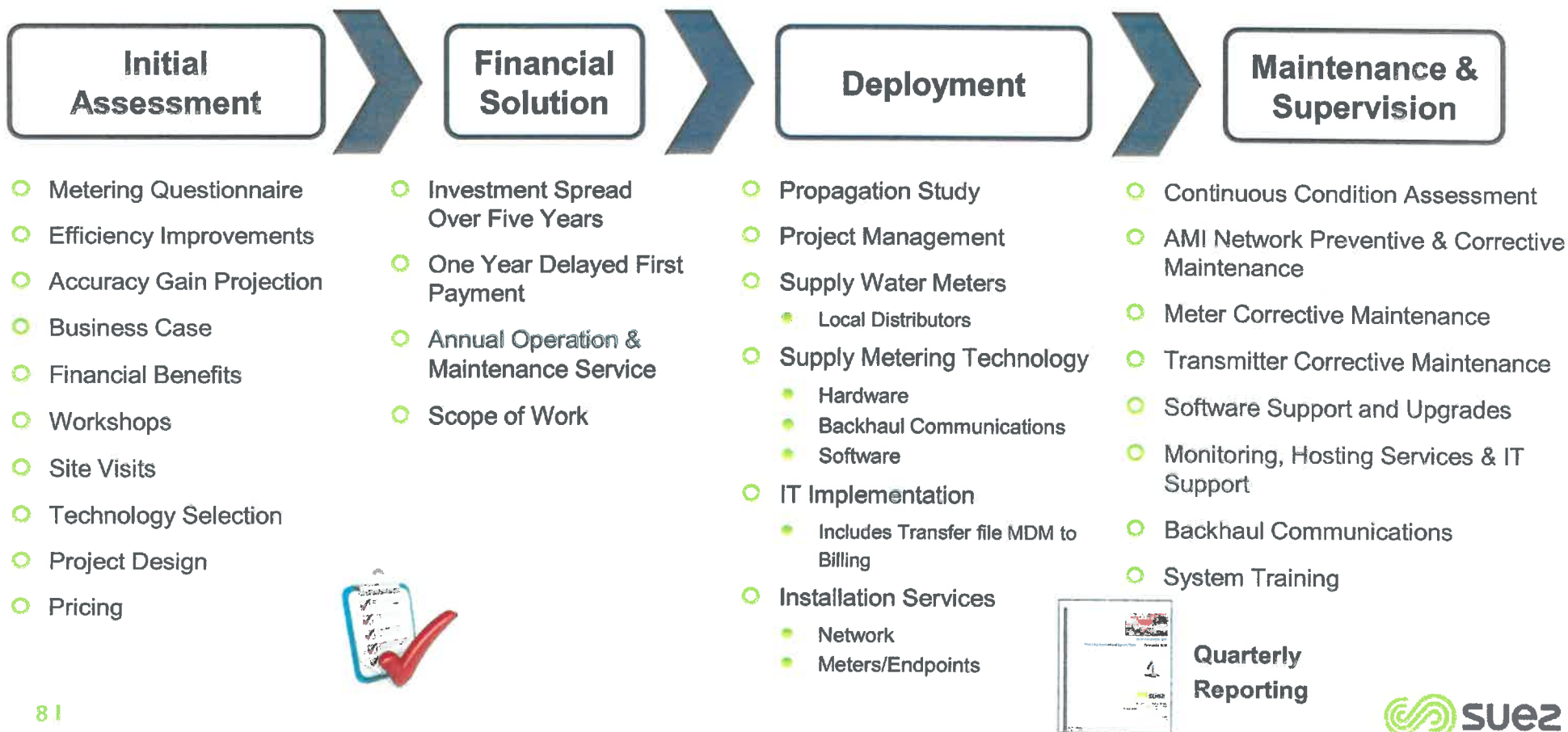
AMI Metering Asset Management – Value Proposition

- **What is SUEZ (USCI) Sole Service Offering?**
 - A Full Comprehensive Asset Management AMI/Metering Program with Preventative and Corrective Maintenance.
- **Who Is The Program Designed For?**
 - This program is specially designed for Small to Mid-Size Utilities.
- **Why Such A Program for Small to Mid-Size Utilities?**
 - Small to Mid-size Utilities want all of the benefits an AMI system has to offer, but lack the funds, project management resources, and most importantly the ability to **Take Care of an AMI System over its Lifetime.**



Asset Management with Metering Maintenance Program

What's Included?



Quarterly Reporting

AMI Metering Asset Management & Maintenance Program:

Benefits of AMI

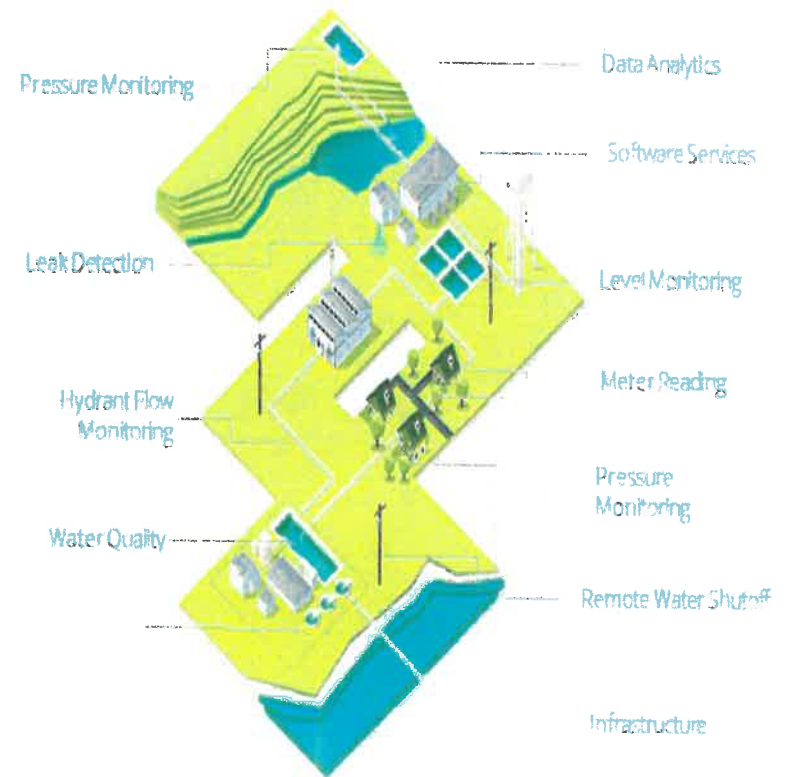
ready for the resource revolution



Today's Solution – Benefits of AMI

Benefits of AMI

- Data Resolution
 - Hourly Water Meter Readings
- Revenue Enhancement
 - Reduce Billing Adjustments, Theft Detection, Revenue Forecasting
- Operating Cost Savings
 - Meter Reading Cost Savings, Customer Service Call Savings
- Improved Customer Service
 - Reactive to Proactive, Anticipate Notifications, More Detailed Information to Customer, Resolve Inquiries with First Call. Flexible Billing
- Operational Tools
 - Conservation, Right Sizing, Water Accountability
- Better Asset Management
 - Asset Accountability
- Responsible Resource Management
 - Reduce Non-Revenue Water



Benefits of AMI: Real World Experience

Real-World Experience

- Reductions in number of field investigations by utility personnel
- Reductions in volume of inquiries at call center (After an initial increase)
- Identification of significant theft
- Non-revenue water reduction
- Extremely high performance - 99%+ expected read rate

AMI Metering Asset Management & Maintenance Program:

AMI System Selection with Propagation Study

ready for the resource revolution



SELECTION

ACLARA STAR AMI SYSTEM

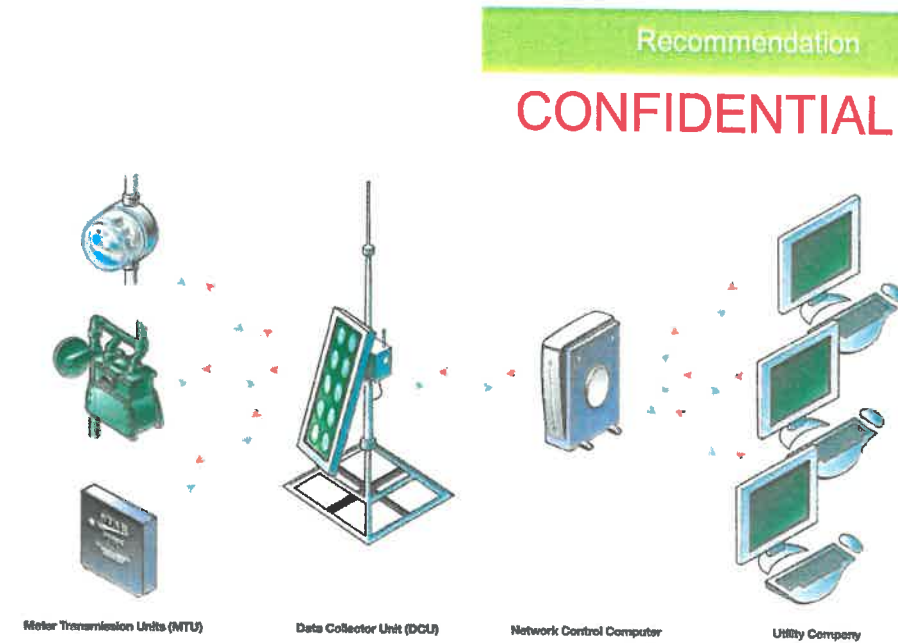
○ Benefits:

- Open System, Customer Portal Option
- Water, Gas and Electric, Leak Detection, Pressure
- Powerful Analytics
- User Friendly Software
- Expandable
- Low Cost Infrastructure with a Level of Redundancy

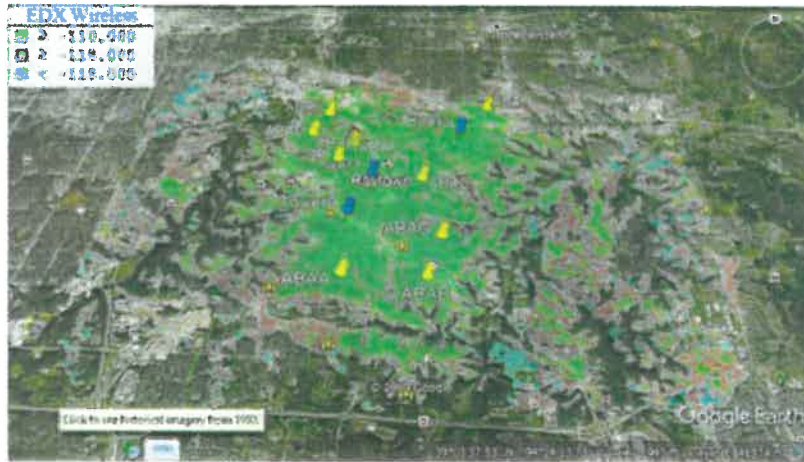
Positive Displacement

○ Benefits:

- Solid Manufacturer
- Mechanical
- Local Distribution



Propagation Study



| DCU Location Name | Latitude | Longitude | Antenna Height | Type |
|-------------------|-------------|--------------|----------------|-------------|
| ABAA | 38.97319662 | -94.47686667 | 30 | Aclara Site |
| ABAD | 39.02886562 | -94.49232075 | 30 | Aclara Site |
| ABAH | 39.0404579 | -94.42587671 | 30 | Aclara Site |
| ABAF | 39.02379412 | -94.47707345 | 30 | Aclara Site |
| ABAG | 38.98608096 | -94.44576183 | 30 | Aclara Site |
| ABAJ | 39.03850855 | -94.48724427 | 30 | Aclara Site |
| Tower2 | 38.994531 | -94.476738 | 80 | Tower |
| ABAE | 39.01637121 | -94.48203459 | 30 | Aclara Site |
| Tower3 | 39.029526 | -94.437294 | 60 | Tower |
| ABAC | 39.00820306 | -94.45174387 | 30 | Aclara Site |
| ABAB | 38.97200884 | -94.45065667 | 30 | Aclara Site |
| Tower1 | 39.009821 | -94.469472 | 100 | Tower |

Raytown, MO Water Full Deployment Propagation Study. Extended PIT Endpoints

CONFIDENTIAL

| Predicted Coverage | | |
|----------------------|----------------|--------------------|
| Predicted Redundancy | MTU Coverage % | Overall Coverage % |
| Single | 1.3% | 99.9% |
| Double | 17.2% | 98.6% |
| Triple | 81.4% | 81.4% |

| DCU Count | |
|-------------------|-----------|
| DCU Site Type | DCU Count |
| Customer Sites | 3 |
| Aclara Proposed | 9 |
| Total DCUs | 12 |

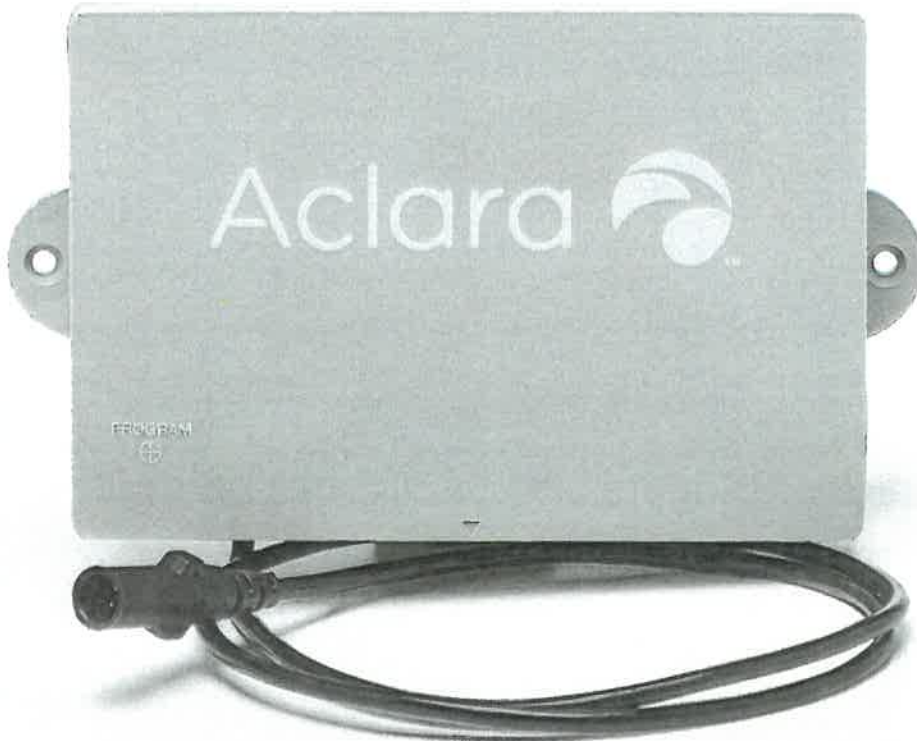
| DCU Quantity and Asset Type | | |
|-----------------------------|-----------|---------------------|
| DCU Site Type | DCU Count | Antenna Height (ft) |
| Electric Pole | N/A | N/A |
| Non-Transmission Pole | N/A | N/A |
| Roof Mount | N/A | N/A |
| Tank / Tower | 3 | varied |
| Lattice Tower | N/A | N/A |
| Aclara Proposed Pole | 9 | 30 |
| Total DCUs | 12 | |

| Customer Data | | |
|-----------------------------|----------------|----------------|
| Type | Provided Count | Modeled Count* |
| Meters | 5,157 | 5,157 |
| Customer Assets (Non-Poles) | 5 | 3 |
| Customer Poles | n/a | n/a |

| Environmental Factors | |
|-----------------------------|---------|
| Solar Panels Required: | 1 |
| Solar Panel Tilt: | 49 |
| Area Wind Rating > 120 MPH: | No |
| Antenna Type: | EM Wave |

| Coverage Territory | |
|-----------------------|-------|
| Metric | Value |
| Total Area (SqMi) | 20 |
| Avg. MTU per SqMi | 258 |
| Avg. MTU per DCU | 430 |
| Highest DCU Elevation | 1,055 |
| Lowest DCU Elevation | 880 |

WATER MTU FEATURES AND FUNCTIONALITY

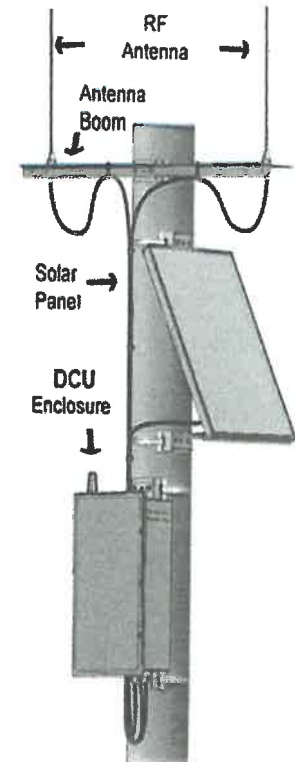


- Hourly reads (configurable)
- Transmits to head-end four times per day (configurable)
- Time synchronized for system-wide snapshot
- On-demand readings
- Over-the-air firmware and configuration updates
- Stores 96 days of hourly reads
- AES 256 encryption: NIST compliant security
- Remote shutoff valve control
- Compatible with all major water meters
- Under or through-the-lid install
- Multiple industry-standard connectors
- 20-year battery life
- IP68 rated
- Single and Dual-port versions



DATA COLLECTOR UNIT

- Solar or AC powered
- Cellular (LTE), fiber optic, Ethernet, Wi-Fi and Wi-MAX WAN backhaul options
- Minimum antenna height (30')
- Flexible installation options:
 - Roof
 - Water tank
 - Street light
 - Utility pole
- No repeaters required
 - The redundancy designed into the network makes repeaters unnecessary



AMI Metering Asset Management & Maintenance Program:

Proposal with Cost Justification

ready for the resource revolution



Project Equipment

Equipment:

Quantity

Aclara Technologies Network STAR® Data Collecting Units (DCU) & Ancillary Components

12

Aclara Technologies Model 3450 STAR® Single Port Endpoints for Water Meters

6,811

Software as a Service (SaaS) - Application Support Service

Included

Billing Interface

Included

Consumer Engagement

Included

Project Management w/Project Manager

Included

Annual Training

Included

Meters

Water Meters 5/8" to 6" Sizes

6,811

Composite Pit Lids for Residential Meter Boxes

Included

Water Meter Installations (with GPS locating)

Included

Cost Justification – Water Meters

Assumptions

| | | |
|------------------------|--------|--------|
| Number of Water Meters | 6,811 | meters |
| Population Served | 28,993 | |
| Average consumption | 40 | gpcd |

| | | |
|-------------------|--------|-------|
| Water Rates | \$7.11 | kgal |
| Sewer Rates | \$0.00 | kgal |
| Age of Meters | 12 | years |
| Non-Revenue Water | 9.2% | |

| | | |
|----------------------------------|---------|----------|
| Meter Reading Cost | \$3.00 | per read |
| Number of Customer Service Calls | 300 | |
| Cost for Customer Service Call | \$65.00 | per call |

Cost Savings

| | | |
|---------------------------|-----------------|------------------|
| Meter Reading Cost | \$20,433 | per month |
| Customer Service Calls | \$19,500 | per month |
| Total Cost Savings | \$39,933 | per month |

Revenue Enhancement - 5%

| | | |
|----------------------------------|------------------|------------------|
| Water underbilling | \$12,302 | per month |
| Sewer underbilling | \$0 | per month |
| Total Revenue Enhancement | \$12,302 | per month |
| Annual Financial Benefit | \$626,820 | Per year |

Firm Pricing*

| | |
|--------------------------------------|-----------------------------|
| Annual Fee Year 1 (Paid in Full) | \$3,870,050 |
| Annual Fee Year 1-7 (Spread) | Refer to GC Document |
| Annual Fee Year 1-10 (Spread) | Refer to GC Document |
| Annual Fee Year 1-15 (Spread) | Refer to GC Document |
| Maintenance Fee: Years 1-15 | \$98,975 |

*Municipal Lease

*Firm Pricing

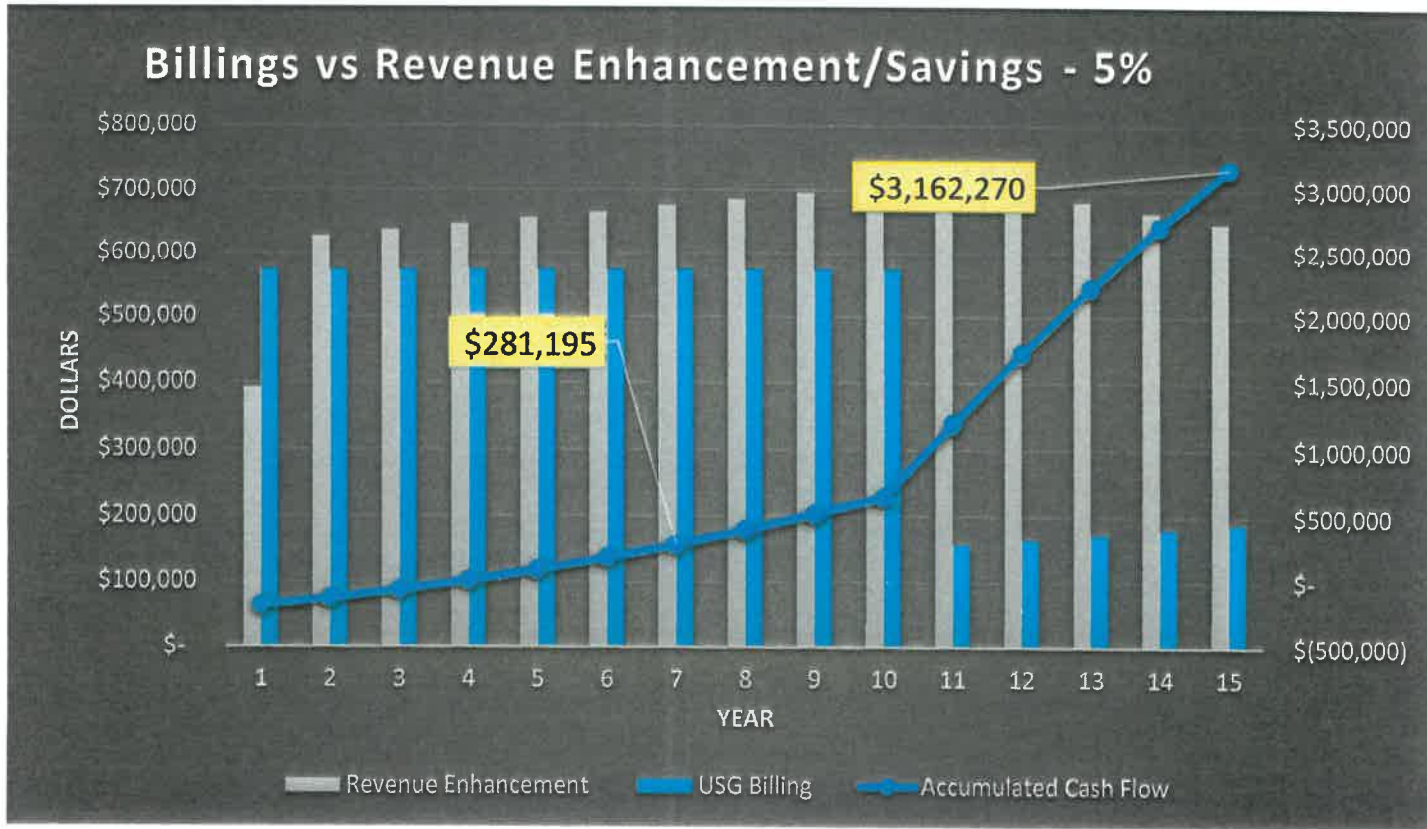
*Subject to Mutual Standard Terms and Conditions and

Annual Cost of Service

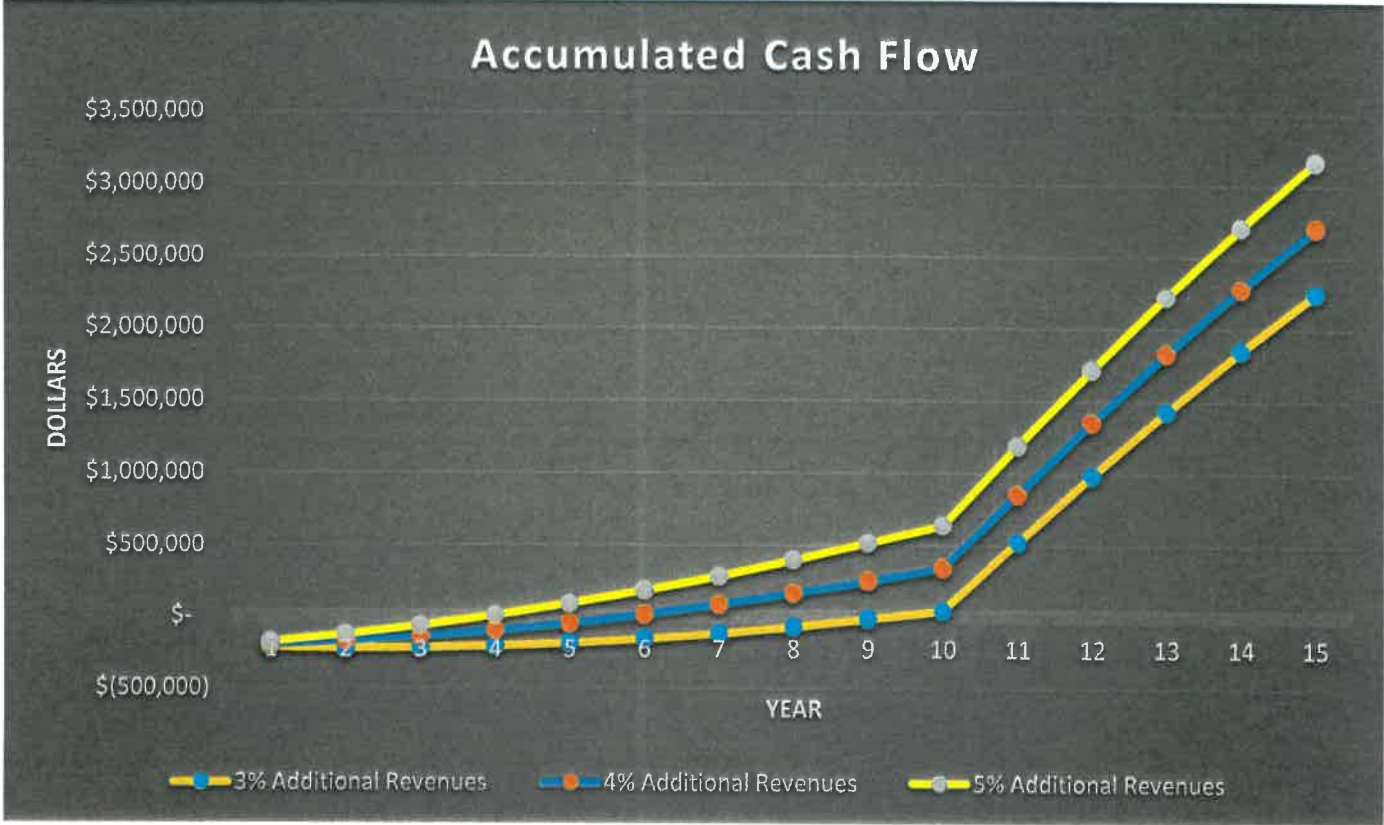
Proprietary and Confidential



Cost Justification



Cost Justification



AMI Metering Asset Management & Maintenance Program:

Asset Management with Maintenance Program

ready for the resource revolution



Operation Support & Maintenance What's Included?

| Annual Support & Maintenance with Asset Management Program | |
|--|----------|
| INCLUDES: | |
| Full Comprehensive Asset Management Program | Included |
| Preventative and Corrective Maintenance | Included |
| AMI System Monitoring Service | Included |
| Labor (Travel and Expenses) and Batteries | Included |
| DCU Backhaul Costs | Included |
| DCU Maintenance | Included |
| Hosting Fees (SaaS) | Included |
| Hosted Software License and Maintenance Fees | Included |
| Application Support | Included |
| Guaranteed AMI System Performance | Included |
| All Firmware Updates | Included |
| Manufacturers Guarantees | Included |
| Training | Included |

AMI Metering Asset Management & Maintenance Program:

Case Studies

ready for the resource revolution



References – Case Studies

Case Study – Concordia, MO

Est: 6%; Actual: 12-18%

CASE STUDY
METERING SERVICES

Project Summary

Customer:
City of Concordia, MO

Type of Project:
Metering Maintenance Program - including installation of a new AMI system and new meters - Aclara® AMI System with Sensus® water meters

Date: 2016

Results:

- Increased meter reading efficiency (100% reading)
- Increased revenue generated by more accurate readings and more efficient process
- Improved cash flow
- Improved Customer Service
- Increased availability of Utility Staff resources for other activities

Solutions

The innovative metering services program from SUEZ Water Advanced Solutions, which allows the AMI infrastructure costs to be spread over many years, helped the City of Concordia successfully submit the project to the Board of Aldermen.

CITY OF CONCORDIA, MO





"To be able to cost justify this type of expense in a small town is a very difficult procedure"

"Hearts in Harmony Since 1840" well describes the City of Concordia, MO. This small community is located between Kansas City and Columbia and offers residents a great place to live and a rural lifestyle to its 2360 residents. Concordia Lake supplies the surface water to the city.

Small communities often find it a challenge to have funds on-hand for yearly maintenance and major capital expenditures without an emergency event taking place. Concordia was no different.

One of the major projects the City considered was replacing the aging meter population and a 15-year-old touch read system - which required a lot of labor-intensive maintenance - with a new Advanced Metering Infrastructure (AMI) system that would allow them to bill directly from City Hall instead of using manpower and resources to go out, bring back, and process data for the City treasurer to issue water bills.

"To be able to cost justify this type of expense in a small town is a very difficult procedure" says City Administrator - Dale Klussman. However, the innovative metering services program from SUEZ Water Advanced Solutions which allows the AMI infrastructure costs to be spread over many years helped the City of Concordia successfully submit the project to the Board of Aldermen. After reviewing the specifics of the project, the Board agreed that the new AMI system would yield considerable benefits and pay for itself quickly.

More efficiency, increased revenue

Not only do the newly installed AMI system and meters spare the Utility staff the laborious task of manually reading and collecting data from thousands of meters but they also provide much more accurate data compared to the previous aging meters. The increased accuracy of the system has already allowed the Utility to capture significantly more revenues. The initial installation of the metering infrastructure was done by SUEZ, allowing Utility staff to focus their attention on other important projects. All future maintenance of the automated system will also be performed by SUEZ which should further increase labor efficiencies. "The ability to tap more than four employees - running a small community that is an awful powerful statement in my opinion" says Dale Klussman.

Better Customer Service

The new AMI system provides near real-time usage data on all customers which allows the Utility to be more proactive, quickly alerting customers of potential water leaks for example. More accurate data also means less billing disputes and better customer service overall. "Our Customer Service has improved dramatically with the availability of hourly data on any given account at our fingertips, allowing us to communicate with our customers about any problem they are experiencing" confirms Dale Klussman.







suez

Utility Service Co., Inc.
1230 Peachtree Street, NE
Suite 1100, Peachtree Building
Atlanta, GA 30309
Tel: 855-925-4113 | www.uts-service.com



suez



References – Case Studies

Case Study – Greensboro, MD

CASE STUDY
METERING SERVICES

TOWN OF GREENSBORO, MD



"Greensboro was facing a challenge to financially support maintenance projects and invest in new ones"

The new AMI system and new meters, and the fact that SUEZ Water Advanced Solutions is in charge of all future maintenance has freed up my team to perform other critical tasks. The labor efficiencies and added revenue generated by more accurate meter readings will provide a quick payback on our investment." *David Kibler, Utility Director*

Capturing more revenue

Since their installation, the new and more accurate meters have allowed the Utility to capture more revenue. In addition, the new automated system has reduced significantly the time dedicated to reading, processing and billing which allows Utility staff to perform other important tasks. Moving from a quarterly billing to a monthly billing has also greatly improved the Utility cash flow.

"The new AMI system and new meters and the fact that SUEZ Water Advanced Solutions is in charge of all future maintenance has freed up my team to perform other critical tasks. The labor efficiencies and added revenue generated by more accurate meter readings will provide a quick payback on our investment" says Utility Director - David Kibler. With its innovative Metering maintenance program - which allows the Initial AMI infrastructure costs to be spread over time and guarantee a timely preventative maintenance of all equipment for the duration of the contract, SUEZ Water Advanced Solutions is bringing AMI to small utilities, that couldn't afford to install or maintain AMI networks until now.

Project Summary

Customer:
Town of Greensboro, MD

Type of Project:
Metering Maintenance Program - including installation of a new AMI system and new Meters - Aclara® AMI System with Neptune E-Coder® water meters

Date: 2016

Results:

- Increased meter reading efficiency (100% reading)
- Increased revenue generated by more accurate readings and more efficient process
- Improved cash flow
- Improved Customer Service
- Increased availability of Utility Staff resources for other activities

Improved Customer Service

The new AMI system, provides hourly data on any customer which helps the Utility be more proactive by pinpointing and quickly alerting customers of potential leaks. Thanks to the accurate data collected continuously and available online, the Utility can respond more diligently and efficiently to any customer inquiry or complaint. For example, the analysis of a customer utility bill over time helps identify recurrent patterns and allows the Utility to understand it and when a true discrepancy occurred, thus reducing billing disputes.

Solutions

The new AMI system combines radio frequency transmitters with over 820 Neptune E-Coder® water meters and an easy to use software to provide the utility with near real-time data. The new water meters use state-of-the-art technology to accurately display readings on consumption rate of flow, and indicate direction of flow and possible leaks.

Realizing that it needed to increase the efficiency of its metering infrastructure, Greensboro's water system contacted its long-time service partner, SUEZ Water Advanced Solutions (Utility Service Co., Inc.). For the past 14 years, SUEZ has successfully maintained the town's tank assets under a maintenance program agreement, providing excellent customer service and building a high level of trust. After carefully reviewing the town's requirements, SUEZ recommended the installation of a new Advanced Metering System (AMS) and new water meters. The company installed the new metering infrastructure without putting any burden on the Utility staff and handles all future maintenance so the Utility can focus on its core competency.



Utility Service Co., Inc.
1290 Peachtree Street, NE
Suite 1100 | Piedmonte Building
Atlanta, GA 30309
Tel: 878-576-6213 | www.utilityservice.com





Next Steps and Conclusion:

With the increase in non-revenue water projected for 2020, Suez (USCI) will:

- Replace Raytown Water Co. meters and deploy an AMI Metering system under the Suez Asset Management and Maintenance Program.
- With our financial partners minimize the impact by spreading the costs over 5 to 15 years (municipal lease).
- With our financial partners provide the option to delay billing for 12 months from date of contract. This will allow you to maximize the increased revenue from new water meters, improved customer service, meter reading operation benefits and savings from the AMI system.

Suez (USCI) has been a partner to Raytown Water Co. for many years.

We look forward to being your partner for many more.

CONFIDENTIAL

AMI Metering Asset Management: Enhance Revenues and Deliver Superior Customer Service for Raytown Water Co, MO

Raytown Water Co Presentation with Pricing Proposal

Tom Stechmann
Water System Consultant

December 10th, 2020

ready for the resource revolution

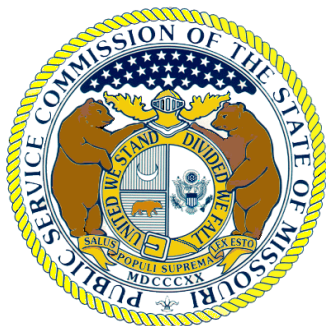


STATE OF MISSOURI

OFFICE OF THE PUBLIC SERVICE COMMISSION

I have compared the preceding copy with the original on file in this office and I do hereby certify the same to be a true copy therefrom and the whole thereof.

WITNESS my hand and seal of the Public Service Commission, at Jefferson City, Missouri, this 29th day of November 2023.



Nancy Dippell

Nancy Dippell
Secretary

MISSOURI PUBLIC SERVICE COMMISSION

November 29, 2023

File/Case No. WR-2023-0344

MO PSC Staff

Staff Counsel Department
200 Madison Street, Suite 800
P.O. Box 360
Jefferson City, MO 65102
staffcounsel@psc.mo.gov

**Office of the Public Counsel
(OPC)**

Marc Poston
200 Madison Street, Suite 650
P.O. Box 2230
Jefferson City, MO 65102
opc@opc.mo.gov

MO PSC Staff

Casi Aslin
200 Madison Street
Jefferson City, MO 65101
casi.aslin@psc.mo.gov

Raytown Water Company, The

Dean Cooper
312 East Capitol
P.O. Box 456
Jefferson City, MO 65102
dcooper@brydonlaw.com

Enclosed find a certified copy of an Order or Notice issued in the above-referenced matter(s).

Sincerely,



**Nancy Dippell
Secretary**

Recipients listed above with a valid e-mail address will receive electronic service. Recipients without a valid e-mail address will receive paper service.