

REGULAR SESSION –WEDNESDAY, SEPTEMBER 20, 2023

STATE OF KANSAS)
) SS
CITY OF KANSAS CITY)

The Board of Public Utilities of Kansas City, Kansas (aka BPU, We, Us, Our) met in Regular Session on Wednesday, September 20, 2023 at 6:00 PM. The following Board Members were present: Rose Mulvany Henry, President; Thomas Groneman, Vice President; Robert L. Milan, Secretary; Mary Gonzales, Jeff Bryant, and David Haley.

Also present: William Johnson, General Manager; Angela Lawson, Acting Chief Counsel; Lori Austin, Chief Financial Officer/Chief Administrative Officer; Jerry Sullivan, Chief Information Officer; Maurice Moss, Executive Director Corporate Compliance; Steve Green, Executive Director Water Operations; Johnetta Hinson, Executive Director Customer Service; Darrin McNew, Executive Director Electric Operations; Jerin Purtee, Executive Director Electric Supply; Steve Nirschl, Director Water Processing; Marshall Robinett, Director Water Distribution; Dennis Dumovich, Director of Human Resources; Dustin Miller, Director of Applications; Douglas Bowen, Director Electric Production Operations & Maintenance ; Michael Oldehoeft, Superintendent Water Operations; Steve Hargis, Supervisor Water Distribution Meters; and Robert Kamp, IT Project Manager.

A video of this meeting is on file at the Board of Public Utilities and can be found on the BPU website, www.bpu.com.

Ms. Mulvany Henry called the Board meeting to order at 6:01 PM. She welcomed all that were listening to or viewing the meeting. She informed all that the meeting was being recorded including video and audio. During the public comment section, those attending in person, wishing to speak, should use the sign-up sheet at the entry and provide their name and address. Public comments were limited to five minutes and should be addressed to the Board. Members of the public who wished to speak to the Board using Zoom needed to use the Raise Hand feature at the bottom of the application or window to signal that they wish to address the board during the public comment section. Members of the public connected by phone only, needed to press *9 to indicate they wished to address the Board in the public comment section. No confidential information should be shared, including, account information. Staff would not provide individual account information during an open meeting. As always, the public could also email or call the BPU with any concerns. She informed that all participants were to act respectfully to each other. Personal attacks or accusations would not be tolerated. All concerns would be directed to the Board only, they would then determine staff involvement. If side discussion was necessary, it was to be conducted outside of the Board room to avoid interfering with presenters or other attendees. If any rules are breached during this meeting, the attendee was subject to removal. Ms. Mulvany Henry introduced herself and the other Board Members along with the General Manager, and Legal Counsel.

Roll call was taken and all Board Members were present.

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Item #3 – Approval of Agenda

A motion was made to approve the Agenda by Mr. Bryant, seconded by Ms. Gonzales, and unanimously carried.

Item #4 – Approval of Work Session Minutes of September 6, 2023

A motion was made to approve the minutes of the Work Session of September 6, 2023, by Mr. Bryant, seconded by Ms. Gonzales, and unanimously carried.

Item #5 – Approval of Regular Session Minutes of September 6, 2023

A motion was made to approve the minutes of the Regular Session of September 6, 2023, by Ms. Gonzales, seconded by Mr. Groneman, and unanimously carried.

Item #6– Public Comments

There were no visitors wishing to speak.

Item #7– General Manager / Staff Reports

- i. *Water Operations Quarterly Update:* Mr. Steve Green, Executive Director Water Operations, Mr. Marshall Robinett, Director Water Distribution and Mr. Steve Nirschl, Director Water Processing, provided an update on Water Distribution and Water Production that included; system improvements and repairs, results of the Argentine pipe diver inspection, and an update on current and new regulations. (See attached PowerPoint.)

Mr. Green, Mr. Robinett, and Mr. Nirschl responded to questions and comments from the Board.

- ii. *Electric Supply Quarterly Update:* Mr. Jerin Purtee, Executive Director Electric Supply, presented an update on Electric Supply Operations to the Board. He included data regarding demand on the power grid during late August 2023. (See attached PowerPoint.)

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iii. *Miscellaneous Comments:* Ms. Lori Austin, Chief Financial Officer/Chief Administrative Officer, provided an update on the Charter ordinance regarding the utility rebate and PILOT exemption programs proposed through the Unified Government (UG). Ms. Austin outlined the expected changes and explained how BPU would modify programming to meet those billing changes.

Mr. Johnson added, the UG had increased several monthly service fees and were also considering altering the current billing format for storm water. He explained the challenges BPU would face if those changes were adopted.

Item #9 – Board Comments

Mr. Haley thanked staff for the electric and water updates. He gave an update on the UG Standing Committee – Economic Development & Finance meeting he attended regarding a potential enhancement at the speedway. He looked forward to further discussion on separating the UG charges from the BPU bill and the deposit policy.

Mr. Groneman had no comments.

Mr. Milan thanked staff for the informative presentations and for their hard work.

Mr. Bryant also thanked staff for their updates and appreciated staff sharing positive feedback employees received from customers.

Ms. Gonzales echoed other Board members and thanked staff for their presentations and added how impressed she was with the cleanliness of the Nearman Water Treatment Plant. She also thanked Ms. Johnetta Hinson, Executive Director Customer Service, and her staff for their recent assistance with customers.

Ms. Mulvany Henry thanked staff for their presentations to the Board and those who presented to the Policy Committee.

Item #10 – Adjourn

At 7:28 PM a motion to adjourn was made by Mr. Bryant, seconded by Mr. Milan and unanimously carried.

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ATTEST:

Robert Miranda
Secretary

APPROVED:

[Signature]
President



WATER OPERATIONS UPDATE

September 20th, 2023



Water Operations Team

- Water Distribution
 - Director Distribution
 - Marshall Robinett
- Water Production
 - Director Water Processing
 - Steve Nirschl

WATER DISTRIBUTION

Water Distribution Recap of 2023

- **2023 Leaks**

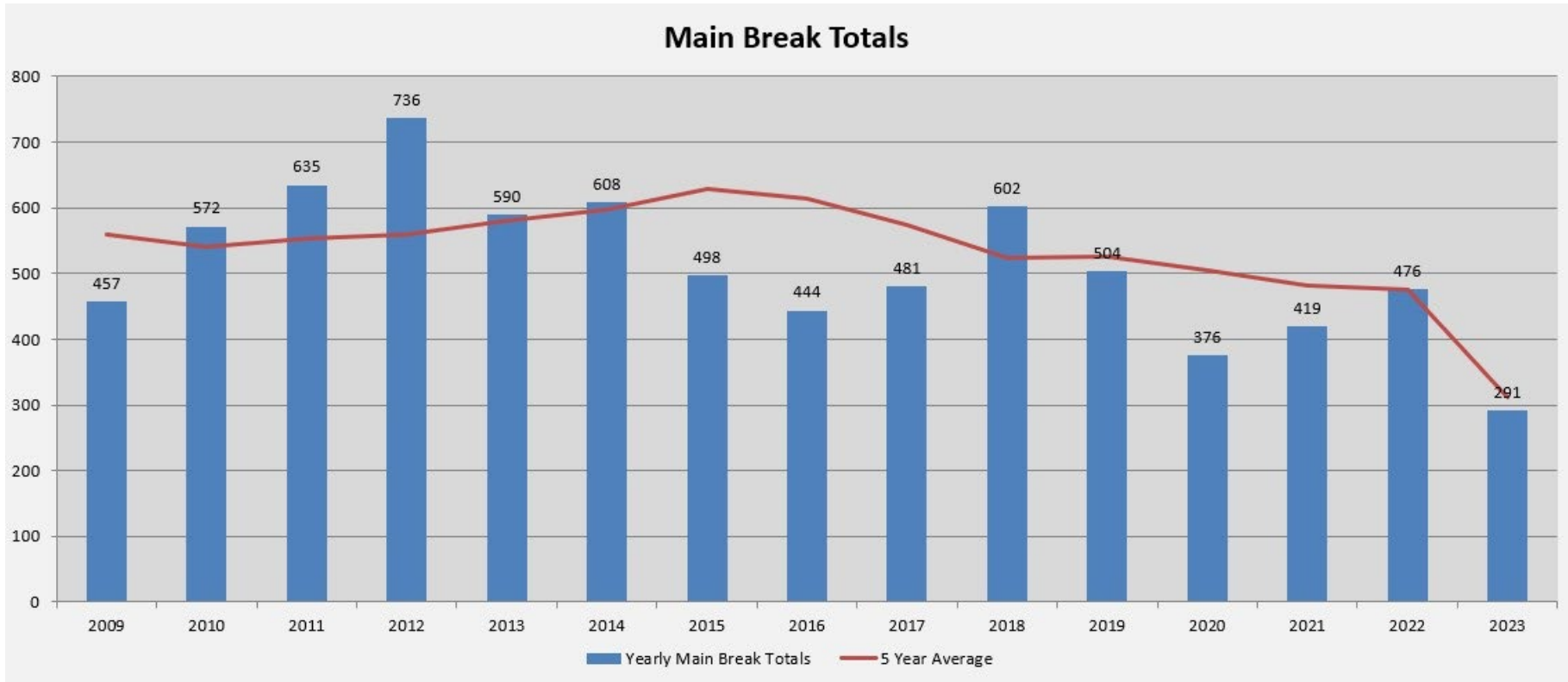
- Main Leaks - 291 YTD
 - 6% below the 5 Year Avg.
 - 14% below the 10 Year Avg.
- Fire Hydrant Work Orders Completed - 367
- Valve Work Orders Completed - 112
- Service Work Orders Completed - 432
- System Improvement Work Orders Completed - 126

Infrastructure Sustainability Measures

- Install Anodes
- Install Poly-wrap
- Repair Practices
- Main Replacement



Water Main Leaks/Breaks



Main Replacement Projects

- Hutton Rd
 - Replaced 1600' of 12" main
 - Replaced a section of ductile iron pipe that had 12 leaks
- Hollingsworth Rd
 - Replaced 2000' of 4" main with 12" PVC
 - Increased the size of the existing main to ensure we meet demand needs in the future
 - Will be extending another 2000' of 12" PVC in the near future



Transmission Main Work

- 4301 Brenner Dr
 - 48” Main Leak
- 3601 N 12th St
 - 36” Main Leak
- 18th St & Kansas Ave
 - Replace three 16” valves
 - Abandon two 16” valves
 - Reconnect 30” and 16” mains
- 3744 Bell Crossing Dr
 - 48” Main Leak
- Boeke St & Cheyenne Ave
 - 30” Main Leak
- 55th St & Kansas Ave
 - 24” Main Leak
- 55th St & State Ave
 - 36” Valve Replacement
- 14th St & Douglas Ave
 - Various valve installation for the new reservoir

Transmission Main Pictures

30th St & Cheyenne Ave



55th St & State Ave



Transmission Main Pictures

18th St & Kansas Ave

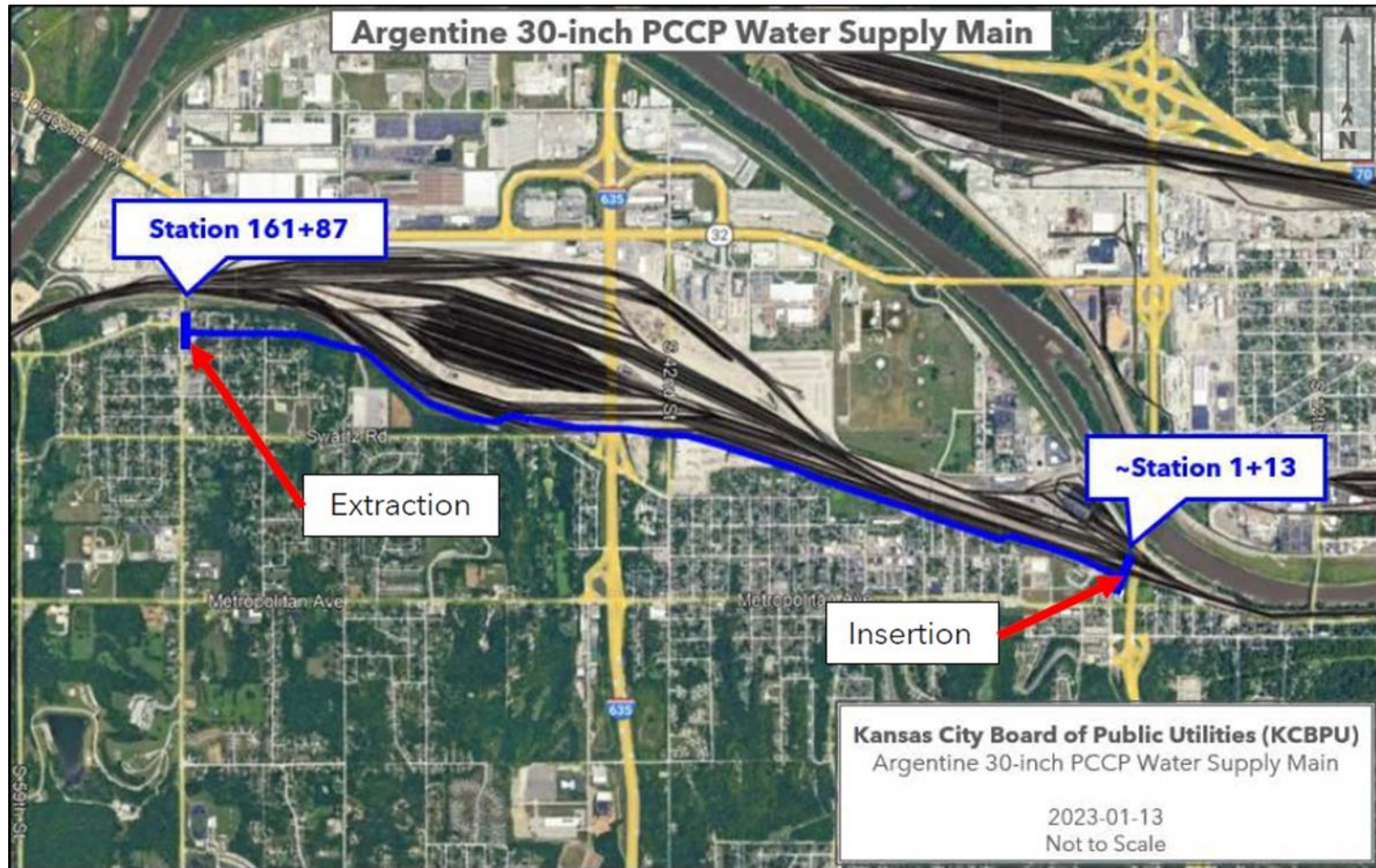


Transmission Main Pictures

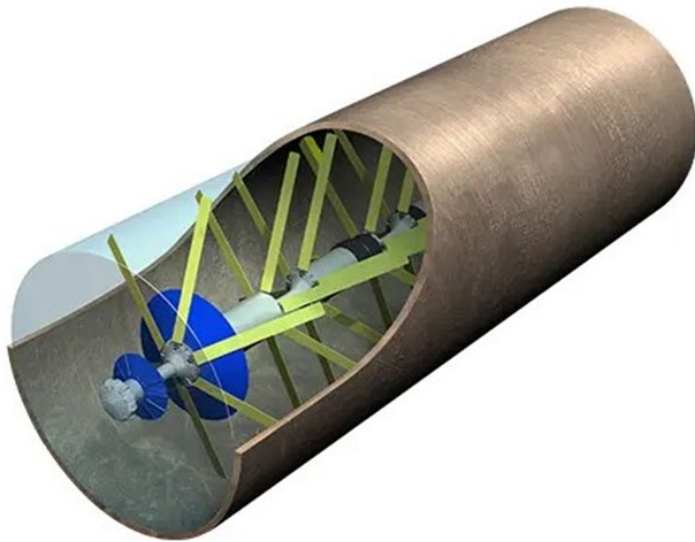
14th St & Douglas Ave



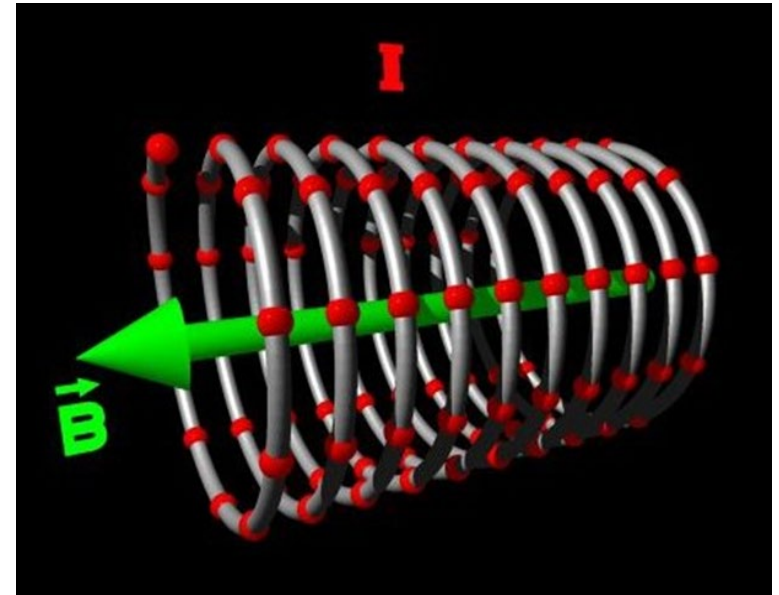
Pipe Diver Inspection



Pipe Diver Inspection



Graphic depicting Pipe Diver flowing through PCCP pipe.



Solenoidal field where breaks in wire can be identified.

Pipe Diver Inspection

- 2016 Inspection and 2022 Reinspection:
 - 16 pipes were previously reported as distressed but were reclassified as not distressed.
 - One length of pipe was newly identified as distressed.

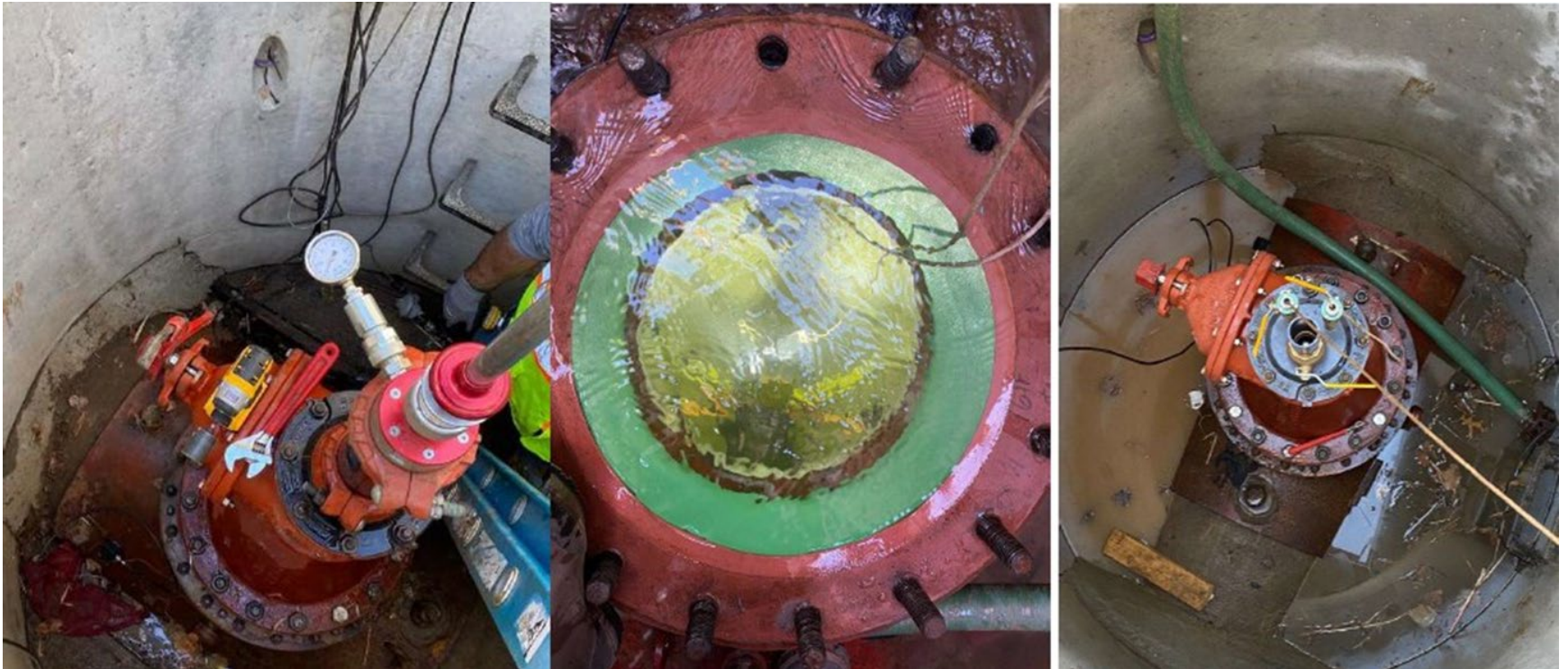
Table 3.1: Inspection Summary

| Date | Pipeline | Start Station | End Station | Distance |
|------------------|-------------------------------------|---------------|-------------|------------|
| November 3, 2022 | 30-inch Argentine Water Supply Main | ~1+13 | 161+87 | 3.07 miles |

Table 3.3: Summary of Pipes with Broken Wire Wraps

| Pipeline | Diameter (inches) | Length (feet) | Pipes with 5 Broken Wire Wraps | Pipes with 10 to 15 Broken Wire Wraps | Pipes with more than 15 Broken Wire Wraps |
|-----------------------------|-------------------|---------------|--------------------------------|---------------------------------------|---|
| Argentine Water Supply Main | 30 | 16,211 | 1 | 0 | 0 |

Pipe Diver Inspection



LCRR Inventory

- Lead and copper inventory must be completed no later than October 2024
 - Started field verification with 14.5K sites
 - Remaining services that require field verification = 1000
 - Methods of verification:
 - Visual inspection at meter box
 - Visual inspection of internal plumbing
 - Hydrovac excavation



Hydrant Hysteria

- 2023 AWWA/KWEA Joint Conference



Customer Comments

Shout-out to Victor Garcia & Steve Hargis in Water Distribution!

Victor serviced a high consumption call for a customer that was legally deaf. He found the leak and made such an impact on the customer that she called to tell us how great of a job he did!

Steve received a hand written thank you from a customer after helping them with water service on their property! He is also receiving praise from his peers for the great work he does with customer care!

Thank you both for leaving a great impression on our customers!

Shout-out to Water Servicemen, Russ Trinkle & Dan Burke!

Both of these gentleman received glowing remarks from customers after helping out with separate difficult situations. Kudos to you both!



WATER PRODUCTION



Monthly Pumpage Comparison

| | <u>2021</u> | <u>2022</u> | <u>2023</u> | <u>Difference</u> | <u>% Difference</u> |
|-----------|-------------|-------------|-------------|-------------------|---------------------|
| | <u>(MG)</u> | <u>(MG)</u> | <u>(MG)</u> | | |
| January | 827.691 | 949.584 | 826.950 | -122.634 | -12.91 |
| February | 818.337 | 818.033 | 737.471 | -80.562 | -9.85 |
| TOTAL | 1646.027 | 1767.617 | 1564.421 | -203.196 | -11.50 |
| March | 854.898 | 903.489 | 834.183 | -69.307 | -7.67 |
| TOTAL | 2500.925 | 2671.107 | 2398.604 | -272.503 | -10.20 |
| April | 791.563 | 859.015 | 782.448 | -76.567 | -8.91 |
| TOTAL | 3292.488 | 3530.122 | 3181.052 | -349.070 | -9.89 |
| May | 826.357 | 944.831 | 911.375 | -33.456 | -3.54 |
| TOTAL | 4118.845 | 4474.954 | 4092.427 | -382.526 | -8.55 |
| June | 930.438 | 1028.534 | 1042.232 | 13.698 | 1.33 |
| TOTAL | 5049.283 | 5503.487 | 5134.659 | -368.828 | -6.70 |
| July | 964.330 | 1066.979 | 1071.019 | 4.039 | 0.38 |
| TOTAL | 6013.613 | 6570.467 | 6205.678 | -364.789 | -5.55 |
| August | 1034.134 | 1005.164 | 1101.410 | 96.245 | 9.58 |
| TOTAL | 7047.747 | 7575.631 | 7307.088 | -268.543 | -3.54 |
| September | 970.568 | 921.517 | | | |
| TOTAL | 8018.315 | 8497.148 | | | |
| October | 908.660 | 968.169 | | | |
| TOTAL | 8926.975 | 9465.318 | | | |
| November | 826.828 | 879.780 | | | |
| TOTAL | 9753.802 | 10345.098 | | | |
| December | 867.945 | 877.276 | | | |
| TOTAL | 10621.748 | 11222.374 | | | |

Chemical Prices 2023

| Chemicals | 2013 | 2016 | 2019 | 2021 | 2022 | 2023 | Annual Average Usage |
|------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------------|
| Chlorine | 0.2344 per/lb | 0.2344 per/lb | 0.2565 per/lb | 0.3265 per/lb | 0.7115 per/lb | 0.7995 per/lb | 730,000 lbs/year |
| Caustic 25% | 0.1485 per/lb | 0.09 per/lb | 0.1175 per/lb | 0.1130 per/lb | 0.1763 per/lb | .1306 per/lb | 1,000,000 lb/year |
| Fluoride | 0.313 per/lb | 0.2615 per/lb | 0.2615 per/lb | 0.2865 per/lb | 0.319 per/lb | 0.3440 per/lb | 175,000 lb/year |
| Polymer | 1.15 per/lb | 1.23 per/lb | 1.30 per/lb | 1.35 per/lb | 1.41 per/lb | 1.55 per/lb | 70,000 lb/year |
| Sodium Bisulfite | 0.1425 per/lb | 0.1450 per/lb | 0.1369 per/lb | 0.1419 per/lb | 0.2010 per/lb | 0.1825 per/lb | 600,000 lb/year |
| Ammonia | 0.1435 per/lb | 0.0120 per/lb | 0.0815 per/lb | 0.1095 per/lb | 0.2000 per/lb | 0.1175 per/lb | 500,000 lb/year |
| Ferric Chloride | 0.155 per/lb | 0.0990 per/lb | 0.1364 per/lb | 0.1444 per/lb | 0.1444 per/lb | 0.2461 per/lb | 1,000,000 lb/year |
| Phosphoric Acid | 0.280 per/lb | 0.280 per/lb | 0.280 per/lb | 0.460 per/lb | 0.850 per/lb | 1.130 per/lb | 185,000 lb/year |
| Sodium Chlorite | 0.460 per/lb | 0.4763 per/lb | 0.5020 per/lb | 0.5460 per/lb | 0.6000 per/lb | 0.6180 per/lb | 450,000 lb/year |

East Basin Outage, Spring outage work performed

- New Yard Hydrants



- New Chemical Valves



New UPS installed to replaced Failed Unit

Old UPS lasted 13 years



Installed April 2023

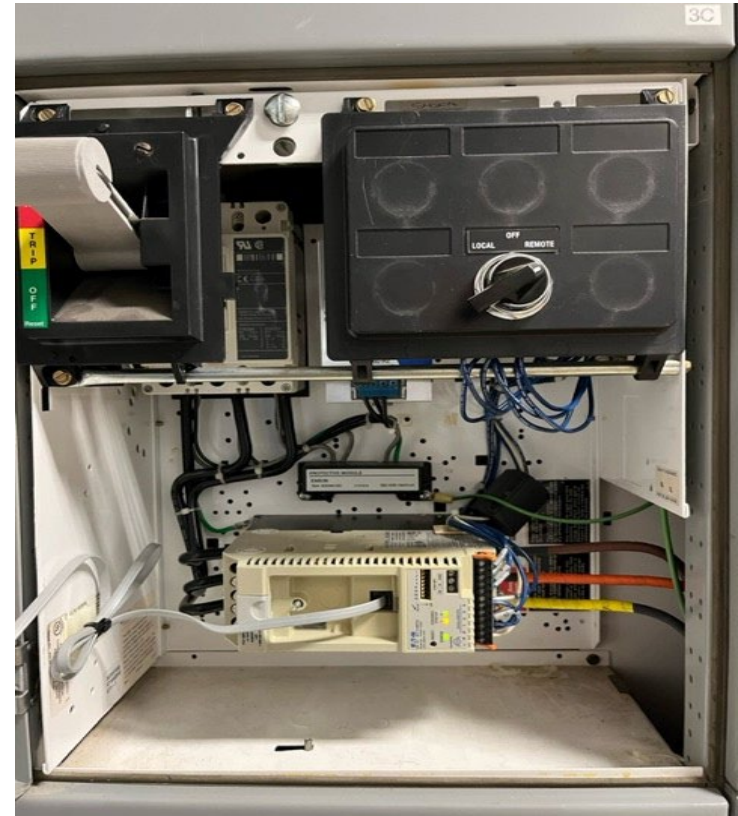


City Water Booster Pump Rebuild and Soft Starter Upgrade

Booster Pump 201



Soft Starter Addition



High Service Pump 1 Electrical Motor Rebuild 700 HP



Filter Console control upgrades and cleaning filter media and throughs

Filter console manual controls were obsolete, replaced with new controllers

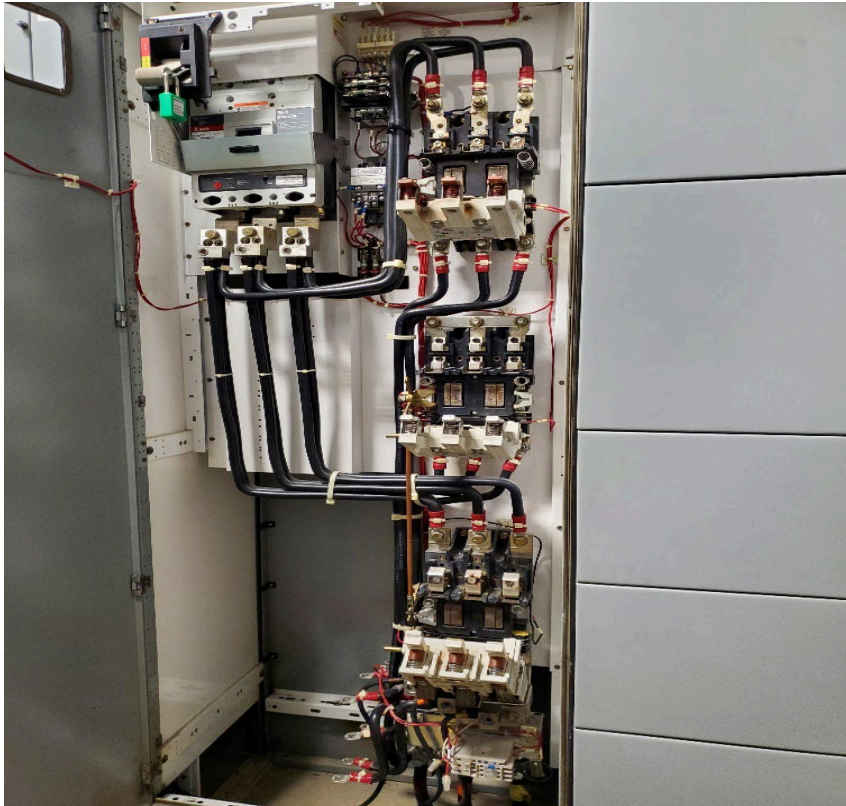


Filter 4 basin, cleaned basin and media. Improve filter productivity and run times

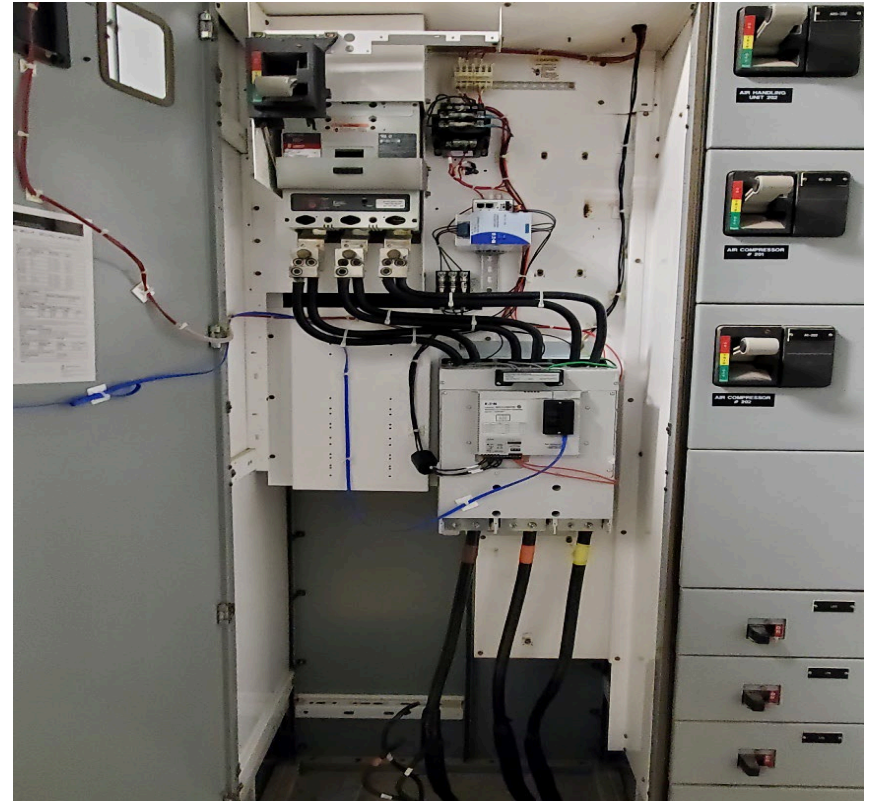


Air Wash Blower 201 Reduced Voltage Starter

Old 480 volt combination starter



New 480 reduced voltage starter



Road Repairs and Asphalt Sealing



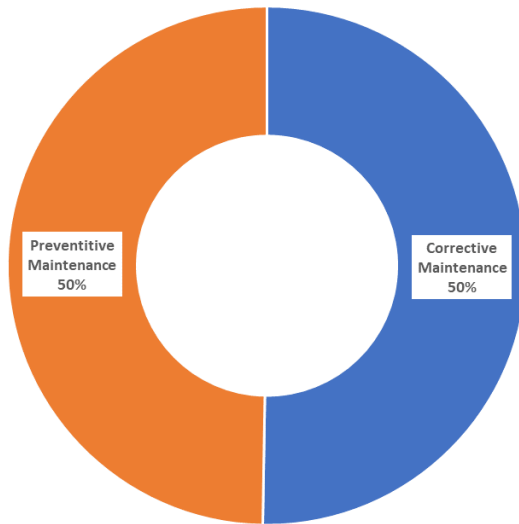
- Last road repairs were done in 2015.
- 250 feet of curbs replaced.
- Asphalt replacement in some areas.
- Asphalt sealing completed for most of plant roads.

District Metering Projects



Water Processing Completion Rate by Workorder Type

WATER PROCESSING COMPLETION RATE BY WORK ORDER TYPE

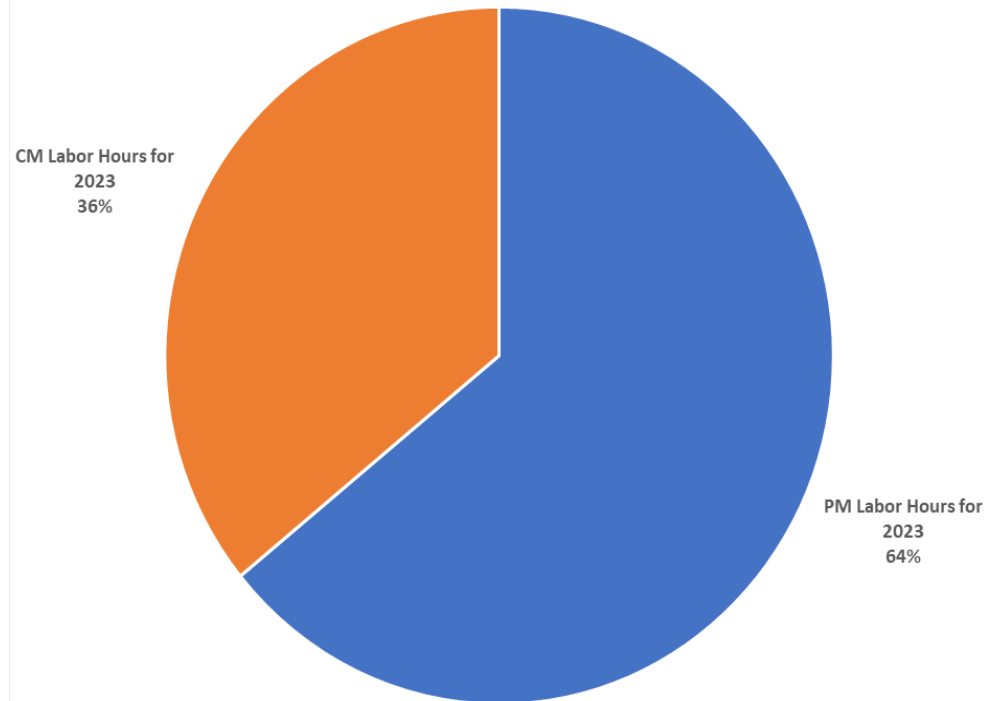


- This metric quantifies the percentage of workorders completed based on when the type of workorder. 190 of the workorders completed are Preventative Maintenance and 192 are Corrective Maintenance.
- 382 workorders have been completed this year to date

Water Processing Maintenance Hours %

- This metric shows the percent of Time spent on Corrective Maintenance 36% Versus Preventative Maintenance 64%

WATER PROCESSING MAINTENANCE HOURS%



- Lead and Copper
 - Completed our Triennial testing requirement summer 2023
 - BPU is required to sample (60) Lead and Copper designated sites
 - No sites above action level
 - New Requirements coming 2024

- UCMR 5 Sampling will begin 2024 - 2025
 - 29 PFAS synthetic chemicals and lithium.
 - Parts per billion to parts per trillion.
 - UCMR 3 (2015) last PFAS testing occurred. Only Six Compounds were analyzed.
 - We had non-detect however only at parts per billion.
 - Final Rule proposed in January 2026.

Operations Staffing

- Operators
 - Fully staffed with 9 operator's with Class IV certification.
 - Seven of the nine are qualified as Utility A.
 - Two are still in training.
 - We continue to work on operator's schedule, goal is maintaining two operators per shift.
 - Safety concerns.
 - Aging plant.

- Aging Infrastructure - Keeping up with building and equipment.
- Future Regulations - Keeping up with regulations, PFAS, Lead & Copper, Disinfection By Products Rule.
- Thanks - Very thankful for assistance from the various departments. Water Engineering, Water Distribution, Water Production Staff, Environmental.



Questions

Thank You

Electric Supply Update

September 20, 2023

Electric Supply Update

- Extreme Heat
 - SPP Data
 - Operational challenges/strategies
- Market Trends
 - CT usage/performance
- EMS SCADA Upgrade project

High Temps 8/21-8/25

- Average temperature 2:00pm - 8:00pm
 - 98.1 degrees (with several hours exceeding 100 degrees)
- Southwest Power Pool
 - ~7800 mw of conventional generation that was de-rated or in outage
 - Wind forecasts that week were projected to be in the 7000-9000 mw range during peak hours (~29% capacity)

- Weather Advisory, Resource Advisory & Conservative Operations Advisory issued throughout the week
 - No EEAs issued; one key factor was that SPP was able to import ~3000 MWs from neighboring RTOs during peak demand hours
- Monday 8/21 @ 4:27pm SPP set new peak demand at 56,184 MW
 - 5.5% higher than last year's peak
 - Generation mix during peak demand
 - Coal 18,458 MW
 - Gas 24,099 MW
 - Wind 8,361 MW

Operational Challenges & Strategies

- High temperatures lead to higher demand on the grid and impairs the efficiency of power generation and transmission
- Primary concern on transmission system is low voltage which can increase the risk of instability on the system which could ultimately lead to localized load reduction
- System Operators utilize reactive resources available to maintain adequate voltage levels
 - Generators
 - Capacitor Banks

Operational Challenges & Strategies

- At the distribution level System Operators are monitoring individual circuits as loads approach operating limits
 - Notifications are made to appropriate field personnel that action may be necessary to prevent damage to equipment and potential outages
 - i.e. working with line crews to switch load to another circuit

- CT4
 - Fuel nozzle replacement in late May
 - CT4 committed/online (minimum runtime of 4 hours)
 - June - 24 days (avg. gas price of \$2.57)
 - July - 27 days (avg. gas price of \$2.77)
 - August - 27 days (avg. gas price of \$2.75)

- Under the EPA Cross-State Air Pollution Rule Program (CSAPR) CT2 and CT3 fall under a “Low Mass Emitter” status that essentially limits annual and ozone season hours of operation of these units. CT2 and CT3 are limited to 278 hours and 300 hours per calendar year and 139 hours and 150 hours respectively during Ozone Season (May 1 - September 31) each year

- CT2/CT3 Commitments
 - Market, Operating Reserves for BA, additional generation in area to alleviate congestion on transmission path, self-scheduled for local voltage support
- CT2 committed/online
 - June - 5 days
 - July - 7 days
 - August - 9 days

CT Performance

- CT2
 - 6 ‘Ozone Season’ operating hours remaining
 - Offering CT2 with a commitment status of *Reliability*
 - Adjusted max run time to 2 hours

CT Performance

- CT3
- In May '23 CT3 had a bearing failure on an electromagnetic clutch
- Replacement clutch ordered and installed; unit returned to service 8/28/23
- CT3 online/committed 3 times since return to service

EMS SCADA Upgrade

- Current phase - GE Grid performing code migration
 - Current SCADA database import and validation
 - Current EMS/SCADA displays import and validation
 - Current ICCP database import and validation
 - Generation model import and validation

EMS SCADA Upgrade

- Phase 2
 - Setup, Configure and install GE Grid Software on KCBPU test lab systems
 - Install GE Grid software on KCBPU systems
 - Migrate GE Grid updated SCADA database, EMS/SCADA Displays, ICCP database and Generation model to systems
 - KCBPU testing updated systems in the test lab

EMS SCADA Upgrade

- Phase 3 - Production configuration and system testing
 - Install GE Grid software on KCBPU production systems
 - Verification of alarm messages, Command and Control, OMS connectivity, ICCP connectivity, Generation tuning
 - Verification of historian data



Thank you

Thank you