HMS Legal

Regulation is a maze. We can show you the way!

Whitney E. Snyder
717.703.0807
wesnyder@hmslegal.com

Thomas J. Sniscak
717.703.0800
tjsniscak@hmslegal.com

501 Corporate Circle, Suite 302, Harrisburg, PA 17110 Phone: 717.236.1300 Fax: 717.236.4841 www.hmslegal.com

November 18, 2024

By Electronic Filing

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor (filing room)
Harrisburg, PA 17120

Re: Petition of Columbia Water Company for Approval of a Lead Service Line Replacement Program, Related Tariff Changes, Modification of Long-Term Infrastructure Improvement Plan, and Waiver of Termination Regulations; Docket No. P-2023-3041845; **CWC COMPLIANCE FILING – LTIIP (PDF IN TRACKED CHANGES)**

Dear Secretary Chiavetta:

At the request of the Bureau of Technical Utility Services, attached is redlined pdf copy of Columbia Water Company's Long-Term Infrastructure Improvement Plan.

Thank you for your attention to this matter. If you have questions regarding this filing, please contact me at (717) 236-1300.

Very truly yours,

/s/ Whitney E. Snyder

Whitney E. Snyder
Thomas J. Sniscak

Counsel for Columbia Water Company

WES/das
Enclosures
cc: Honorable Mary D. Long (by email, malong@pa.gov)
Honorable Charece Z. Collins (by email, charcollin@pa.gov)
Per Certificate of Service

COLUMBIA WATER COMPANY

MODIFIED
LONG-TERM INFRASTRUCTURE IMPROVEMENT PLAN

2023-2027

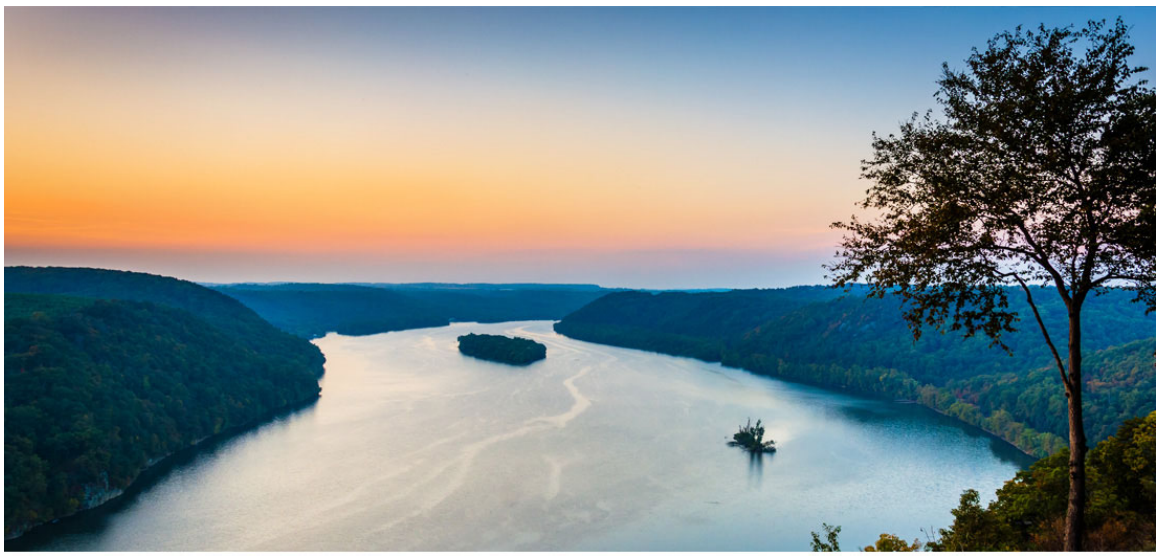


Table of Contents

Introduction

In accordance with the requirements of 66 Pa. C.S. §§ 1350 - 1360 and the Public Utility Commission's Final Order for the Implementation of Act 11 of 2012 (Public Meeting of August 2, 2012, Docket No. M-2012-2293611), Columbia Water ~~Company~~Company's (CWC) ~~is submitting this~~ Long-Term Infrastructure Improvement Plan (LTIIP~~). CWC's LTIIP~~) addresses infrastructure investment through its long-established and cost-effective Distribution System Improvement Charge (DSIC)[1],[2]~~. This LTIIP incorporates the Marietta rate district and adjusts future spending projections to account for changes in available capital and the regulatory environment.~~[2].

Since its establishment of a DSIC in April of 2003, CWC has replaced over 27,400 ~~-~~feet of pipe. This represents about 3.8% of its distribution system pipe that has been renewed through the DSIC program. In addition to pipe, CWC has replaced 940 service lines which is approximately 9% of the total service lines and 5,330 old age meters which is over 51% of the Company's meters. This has allowed CWC to continue to provide safe and reliable service to its customers. In addition, the DSIC has allowed the Company to manage infrastructure replacement costs in an effective manner by directly targeting those costs without the need for additional rate case filings, the reasonable costs of which are borne by the ratepayers.

Prior to Commission approval of the Company's last rate filing on March 1, 2018 at Docket No. R-2017-2598203, the Company operated two districts known as the Columbia District and the Marietta District. For purposes of the DSIC, the March 1, 2018 Commission Order combined the rate districts and made the Marietta Rate District DSIC eligible. Prior to the March 1, 2018 Commission Order, only the Columbia Rate District was DSIC eligible. This LTIIP is for CWC's distribution system ~~which~~that is located in the Columbia and Marietta rate districts. ~~It~~On March 31, 2022, the Company acquired East Donegal Township Municipal Authority ("East Donegal").[3] The Company operates the East Donegal Rate District as a separate, independent system. Except to the extent necessary to carry out its Lead Service Line Replacement (LSLR) Plan (LSLR Plan), as discussed below, the Company's LTIIP does not include the distribution system located in the East Donegal ~~rate district~~Rate District.

In accordance with the requirements of 66 Pa. C.S. § 1311 and the Public Utility Commission's Final Rulemaking Order for the Implementation of Act 120 of 2018 (Public Meeting of February 24, 2022, Docket No. L-2020-3019521), CWC is now submitting this modification to its LTIIP to incorporate CWC's LSLR Plan into its LTIIP. CWC's LSLR Plan addresses the Company's efforts to replace Company-owned and Customer-owned service lines made of lead materials as

[1] The Pennsylvania Public Utility Commission authorized CWC to establish a DSIC through Final Order dated April 17, 2003 at Docket No. P-00021979.

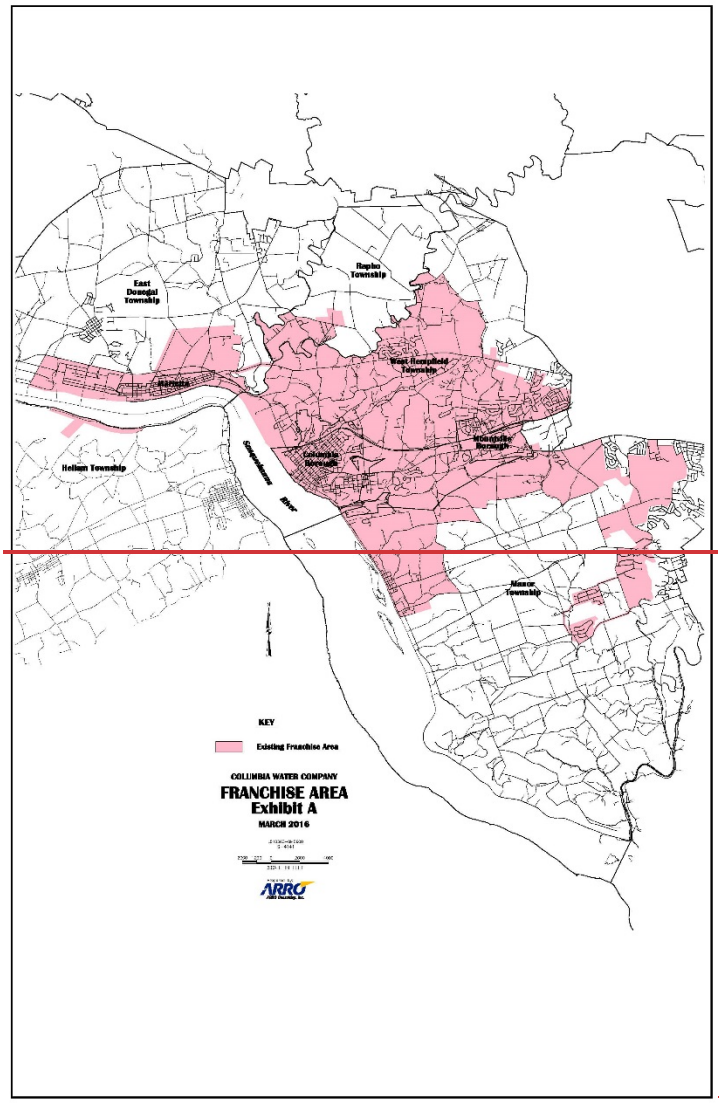
~~[2] The Pennsylvania Public Utility Commission authorized CWC to include the Marietta Rate District into its DSIC program through Final Order dated March 1, 2018 at Docket No. R-2017-2598203.~~

[2] The Pennsylvania Public Utility Commission authorized CWC to include the Marietta Rate District into its DSIC program through Final Order dated March 1, 2018 at Docket No. R-2017-2598203.

[3] The Pennsylvania Public Utility Commission authorized CWC to acquire the East Donegal Township Municipal Authority through Order dated February 3, 2022 at Docket No. A-2021-3027134, *et al.*

approved at Docket No. P-2023-_____3041845. The modified-LTIIP only applies to the East Donegal Rate District to the extent necessary to implement its LSLR Plan.[4]

CWC provides public water service to residential, commercial, public and industrial customers in Columbia, Marietta and Mountville Boroughs, West Hempfield, Manor, and East Donegal Townships, Lancaster County and Hellam Township, York County, Pennsylvania. CWC served approximately ~~10,400~~12,154 customers at the end of year ~~2021~~2022. Figure 1 shows the CWC service area covered by this LTIIP.



[4] The East Donegal rate district does not have a DSIC. As a result, the Company does not include East Donegal capital improvements in its DSIC. Similarly, LSLR costs that are attributable to the East Donegal system will not be recovered through the DSIC. The Company, however, reserves the right to request Commission approval to apply the DSIC to the East Donegal Rate District and recover these LSLR costs and all other DSIC-eligible costs attributable to the East Donegal Rate District through the DSIC.

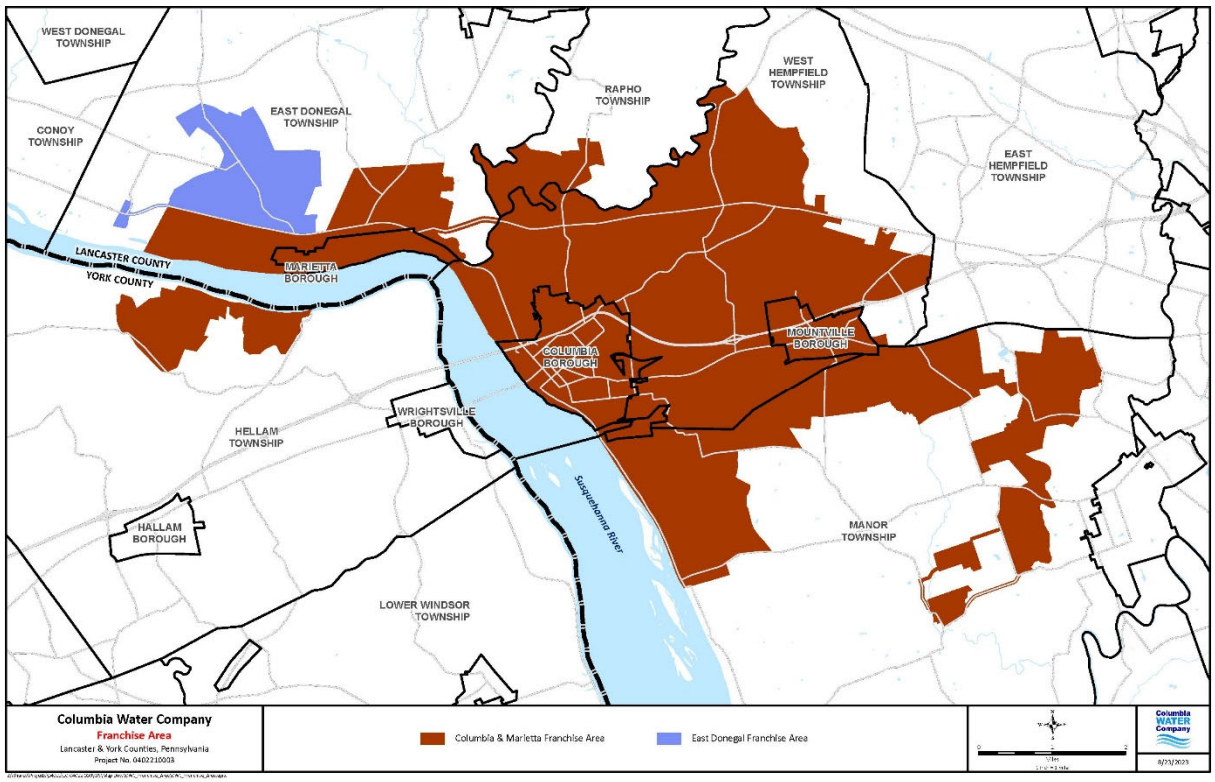


Figure 1 – Columbia Water Company Service Area

The CWC distribution system is comprised of water mains that vary in size from 4-inch through 36-inch with the material type being mainly cast iron and ductile iron. The age of the water mains range from the 1870s through ~~2021~~2023. The condition of the pipes vary throughout the system and age is not always the best indicator of pipe condition. Other factors like the original quality of the pipe, installation and geology impact the pipe condition and reliability.

This LTIIP identifies how CWC will use the DSIC to replace aging infrastructure at an accelerated pace. This LTIIP will identify the types and ages of infrastructure eligible for DSIC recovery; schedule for the planned replacements; location of the eligible property; estimates of the quantity to be replaced; projected annual expenditures; manner in which the replacement will be accelerated; workforce management plan to ensure work is completed safely and cost effectively; and description of outreach to other utilities to minimize disruption to customers; as well as the benefit to customers of accelerated infrastructure rehabilitation and replacement.

This LTIIP will also incorporate the Company's LSLR Plan into its LTIIP. In October 2018, Governor Wolf signed into law Act 120 of 2018 (Act 120), which became effective on December 23, 2018. Act 120 amended Section 1311(b) of the Public Utility Code in order to, *inter alia*, authorize water utilities to pursue comprehensive replacement of lead service lines (LSLs) that remain in service across Pennsylvania subject to Commission approval. The Commission promulgated its LSLR Regulations requiring a Class A water public utility to remove and replace all LSLs, whether entity-owned or customer-owned, within or connected to its water distribution systems within 25 years from the effective date of the Commission's regulations. Moreover, 52

Pa. Code § 65.54(b) requires that the utility shall include with its LSLR Program a modified LTIIP containing a LSLR plan as a separate and distinct component of the entity's LTIIP. Accordingly, Columbia Water has begun efforts to replace LSLs in its system, including galvanized materials downstream of a LSL, as well as any lead pigtail, gooseneck, or other fitting that is connected to a LSL. This LTIIP will identify how CWC will incorporate its LSLR Plan into its LTIIP to continue replacing aging infrastructure in combination with the replacement of LSLs.

Section 1 – Types and Age of Eligible Property

A listing of all eligible property, as defined in 66 Pa. C.S. §1351-(3), is provided in this section. CWC developed and integrated a Geographic Information Systems (GIS) to map and manage its water system assets. The water system assets such as water mains, valves, hydrants, tanks, and service lines are spatially located and attributed with information about the distribution system. This information is supplemented with paper mapping and files as necessary. This process provides the means for CWC to document data and provides the Company with an efficient means to identify DSIC eligible facilities for replacement. These efficiencies translate into direct savings to the customers by specifically targeting the appropriate facilities to be replaced.

CWC has also developed a LSL inventory to locate, track, and replace Company-owned and Customer-owned service lines that contain lead, galvanized steel downstream of a LSL, and lead pigtails, goosenecks, or other fittings connected to LSLs. Columbia Water has incorporated the LSL inventory into its GIS to map and manage these assets. This information is supplemented with paper mapping and files as necessary.

CWC owns the following water system components:

Water mains – In a water distribution system the water mains form the network necessary to distribute water to the customers. Larger water mains are used to move large volumes of water to pressure zones and key demand areas. Smaller mains fill in the network and are normally located beneath the streets and roads in the front of homes, businesses, schools and factories. Water gets delivered from the water main to the customer through a service line. CWC owns approximately 722,890 Linear Feet (LF) of water mains, not including the East Donegal Rate District. The material type of the water main generally depends on the installation date and the installing party. Newer mains are normally ductile iron cement lined (DICL) pipe with the older mains being mainly unlined cast iron pipe. Very limited pockets of polyvinyl chloride (PVC) exist within the system.

Company-Owned Service lines - Water gets delivered from the water main to the customer's curb stop through a Company-owned, pressurized service line. CWC owns the service line between the water main and the curb stop ~~("Company-owned service line"). The service line from the curb stop to the customer's building ("Customer-owned service line") is owned by the customer and any replacement of the customer's portion of the service line is the responsibility of the customer and thus Customer-owned service lines are not included in this LTIIP.~~ (Company-owned service line). The Company-owned service lines vary in size from 6-inch down to ¾-inch with a majority of CWC's service lines being constructed of copper. ~~Only copper is used when Company-owned service~~

~~lines are replaced.~~ A small portion of Company-owned service lines may be made of lead. Only copper is used when Company-owned service lines are replaced. The Company owns approximately 10,407 service lines for its Columbia and Marietta Rate Districts and 1,718 service lines for its East Donegal Rate District. The Company estimates the total number of Company-owned LSLs that need to be replaced to be less than 400. CWC plans to identify, at a minimum, a cumulative average of 10.0% of the initial unknown service materials annually by means of utilizing existing records, modeling, statistical analysis, and mechanical excavation.

Valves – Valves are used to control the volume and direction of flow in the distribution system. They are also used to isolate sections of water main for replacements or repairs. Almost all valves are buried and are opened or closed through a valve box that extends from the valve to the ground surface. The valves vary in size from 4-inch through 16-inch. CWC owns approximately 3,535 valves in its system, not including the East Donegal Rate District.

Hydrants – Hydrants are typically located along roadways and right-of-ways. Hydrants are used to flush water from the water system and to assist in fighting fires. Generally, a hydrant can be isolated from the distribution system by opening or closing a dedicated hydrant valve. Hydrants play a critical role in system maintenance and community fire protection. CWC owns approximately 978 hydrants in its system~~.~~, not including the East Donegal Rate District.

Meters – Meters are used to measure the amount of water used by a customer. Meters are sized based upon the amount of water a customer uses. Typically residential customers have a 5/8-inch or 3/4-inch meter. Commercial customers have meters that range from 3/4-inch through 2-inch meters. Industrial customers normally have meters in the 2-inch through 6-inch range. CWC owns approximately 10,407 meters in its system, not including the East Donegal Rate District.

Customers own the following water system components:

Customer-Owned Service Lines - the portion of the service line extending from the Curb Stop to the meter or one foot inside a building foundation, whichever is farther (Customer-owned service line). The Customer-owned service line is owned by the customer. Generally, any replacement of the Customer-owned service line is the responsibility of the customer and not included in this LTIIP. However, Customer-owned service lines are included in this LTIIP only for purposes of the LSLR Plan and the replacement of Customer-owned service lines made of lead materials. The Customer-owned service lines vary in size from 6-inch down to ¾-inch with a majority of Customer-owned service lines being constructed of copper. A small portion of Customer-owned service lines may be made of lead. Copper or plastic is used when Customer-owned service lines are replaced pursuant to the LSLR Plan. The Company has identified approximately 12,115 Customer-owned service lines across all three rate districts. The Company estimates the total number of Customer-owned LSLs that need to be replaced to be less than 400. CWC plans to identify, at a minimum, a cumulative average of 10.0% of the initial unknown service

materials annually by means of utilizing existing records, modeling, statistical analysis, and mechanical excavation.

Table 1 provides a breakdown of eligible property by type~~.~~, not including the property eligible for replacement under the LSLR Plan. Table 2 provides a breakdown of the water main by size. Table 3 provides a breakdown of eligible property for the LSLR Plan. Table 5 provides a breakdown of the company side and customer side service line materials eligible under the LSLR Plan by material.

Table 1 – Types and Age of Eligible Property

Property Type	Quantity***	Age (Year)
Water mains **	722,890 LF	1875 - ~~2021~~2023
Company-owned service lines	10,407 EA	1875 - ~~2021~~2023
Valves	3,535 EA	1875 - ~~2021~~2023
Hydrants	978 EA	1875 - ~~2021~~2023
Meters	10,407 EA	1990 - ~~2021~~2023

** - less than 2% of all water mains were installed prior to 1900.

*** - does not include the East Donegal Rate District.

Table 2 – Quantity of Water Mains by Size

Water Main Diameter (inches)	Quantity (Linear Feet~~))~~**
4	7,550
6	143,650
8	311,050
10	52,200
12	195,000
16	13,100
36	340
TOTAL	**722,890**

** - does not include the East Donegal Rate District.

Table 3 – Types and Age of Eligible Property Under the LSLR Plan

Property Type	Quantity**	Age (Year)
Company-owned service lines	12,051 EA	1875 – 2023
Customer-owned service lines	12,050 EA	1875 - 2023

** - only eligible to the extent the service lines are made of lead materials.

Table 4 – Company-Side and Customer-Side Service Lines Eligible Under the LSLR Plan by Material

Company Side Material		Customer Side Material	
Lead	4	Lead	1
Copper	4,297	Copper	2,135
Unlikely Lead	4,560	Unlikely Lead	5,103
Unknown	3,173	Unknown	4,807
Likely Lead	1	Likely Lead	1
Other	16	Other	3
TOTAL	12,051	TOTAL	12,050

Section 2 – Schedule for Planned Replacement of Eligible Property

CWC understands the importance and benefits of continuous renewal of aging infrastructure to continue to provide safe and reliable service to our customers. This section provides an overview of the planning process for replacing aging water distribution system infrastructure~~.~~ and Company-owned and Customer-owned LSLs. This section does not discuss the planning process for new water main extensions or for improvements to treatment, storage and pumping facilities since they are not DSIC eligible.

Many components must be evaluated and weighted when determining which infrastructure to replace in a given year. In general the following components, in order of priority, are used to select infrastructure to replace each year:

- Planned state highway improvements;
- Planned municipal street improvements;
- Planned large scale improvements by other utilities;
- Water main break frequency;
- Age;
- Material quality; and
- Installation quality.

The first three items are given the highest priority since CWC has little to no influence on the scheduling of work by outside entities. CWC understands the significant benefit to the customers and municipalities when infrastructure is replaced and/or improved concurrently with other public infrastructure work. CWC meets at least annually with the municipalities in which it serves public water to coordinate the replacement of water system infrastructure with planned street upgrades. This directly reduces the cost to the Company and thus, to customers, by providing for less construction work and expense to replace these lines.

With respect to material quality, the Company will prioritize the replacement of services lines made of lead materials. These projects will be prioritized based on targeted sensitive populations as defined by the Environmental Protection Agency (EPA) and the Pennsylvania Department of Environmental Protection (PADEP), which includes areas with elevated levels of lead in tap water, areas with high concentrations of lead service lines, and/or areas of the distribution system which have elevated corrosion rates. A list of sensitive populations has also been developed to determine the service line materials. The list includes schools, nursing homes, large apartment buildings, churches, and industries. These service lines have been or will be detailed as sensitive populations in the Service Line Inventory. Homes with multiple meters and multiple family residents will also be prioritized to determine service line material.

Lead materials will be identified through four methods: (1) in combination with main replacements, (2) through mechanical excavation, (3) through customer self-surveys, and (4) emergency repairs, as set forth below:

In Combination with Main Replacements - As part of its broader LTIIP efforts, Columbia Water will analyze record-reviews of old age mains within the oldest parts of the distribution system to determine which water mains in the distribution system should be replaced. Prior to choosing a LSLR Project Area, the Company's distribution crew will review records and/or physically inspect a portion of the service lines within a proposed area to gauge the likelihood of lead within that area. Coordination with municipalities will take place to minimize costs and minimize impacts on roads and neighborhoods. Once the LSLR Project Areas are determined, the projects will be posted on the Columbia Water website at least six (6) months in advance of the work being done. Prior to the work being initiated, Columbia Water staff will reach out to the customers to determine all service line materials within the affected area, and to provide the customers with detailed information regarding the routine procedures and the potential health risks involved.

Mechanical Excavation - Areas with a higher likelihood of having lead service lines will be prioritized for these projects. Columbia Water will physically excavate the service lines to determine material types. If a service line is determined to be lead, coordination will occur with the customer(s) and the property owner to have the service line replaced.

Customer Self-Surveys - Columbia Water will reach out to the customers with lead, galvanized requiring replacement, or unknown service lines. Customers who discover a lead service line may call and schedule to have their service line replaced. CWC will schedule to replace customer-owned lead service lines. If the company side is lead, it will

be replaced at the same time with the customer side. These replacements will occur as discovered.

Emergency Repair - If a lead service line is leaking or otherwise defective at the time it is discovered, CWC will replace the lead service line in accordance with its tariff. Columbia Water staff will maintain the proper equipment and tools necessary for emergency service line replacements. If a lead service line is discovered during an emergency but is not leaking, the replacement of the line will be scheduled for replacement at a later date.

The Company plans to undertake repair and replacement of its system components in the following manner:

Water main replacement – Work normally entails full replacement of the water main (as opposed to rehabilitate) since this option eliminates long-term structural and integrity deficiencies that remain when a water main is simply rehabilitated. Further, this option is also considerably less disruptive to the customer since the new main can be installed, tested and placed into service before moving service lines from the old main to the new main. Disruption of water service is minimal since the customer is without service during their service line switch over only. In areas where considerable construction or restoration costs would be incurred to replace a water main, rehabilitation of the existing main is pursued.

Valve and hydrant replacement – Work normally involves the full replacement of the valve and hydrant. Occasionally a relatively new valve or hydrant will be rebuilt and/or reused but only in those situations where the reliability and integrity are well known. Valves and hydrants normally get replaced at the same time a water main is being replaced or rehabilitated. There are times when critical valves and hydrants are replaced independently of a full scale water replacement project. Properly operating valves greatly benefit the customers since it minimizes the geographic area impacted by a main repair and minimizes the amount of time needed to make a repair. A schedule of valve and hydrant replacements is provided in Table ~~1~~5.

Company-Owned Service line replacement – Work normally involves the full replacement of the company-owned service line between the water main and the curb stop. The work will include replacement of the curb stop and curb box. Company-owned service lines get replaced during full scale water replacement projects or if the Company determines they otherwise need to be replaced due to conditions including but not limited to leaks or malfunction.

Meter replacement or repair– Residential and commercial meters normally involve full replacement. Some commercial and industrial meters can be rehabilitated. Meter replacement is typically based upon meter age. CWC replaces its meters in compliance with the schedule in the Commission's regulation at 52 Pa. Code § 65.8. Accelerated replacement of meters will benefit customers directly through more accurate meter readings.

Lead service line replacement – Work involves replacing Company-owned and Customer-owned LSLs using existing routes through a combination of pipe splitting and/or pipe pulling. This approach removes or displaces existing pipe while simultaneously replacing it with a new pipe and is the preferred method under normal circumstances. Columbia Water may also utilize guided boring to install new pipe along a different route or using open trench excavation to remove replace the pipe. The appropriate replacement technique will depend on a combination of many site-specific characteristics, including, but not limited to, time constraints, soil characteristics, depth to ground water or rock, depth of road foundation, condition of the service line, proximity of other utility services (e.g., electric, gas, cable, sewer, storm water), site conditions (e.g., access, parking, paving, landscaping, overhead obstructions), pipe conditions (e.g., length of pipe, pipe diameter and wall thickness, bury depth, configuration, and repair history, and conditions inside the home like a finished basement with limited access to the water meter and plumbing. All new pipe installation will be copper or plastic.

Section 3 – Location of Eligible Property

All of the CWC's eligible property is located in Lancaster and York Counties, Pennsylvania. More specifically, the property is located in the boroughs of Columbia, Marietta and Mountville and in portions of the townships of West Hempfield, East Donegal, Hellam and Manor. See Figure 1 for additional details.

Areas with Company-owned and Customer-owned LSLs are more specifically found on houses built prior to 1950 with water mains older than 1970 within Columbia Borough and Marietta Borough. Though lead service line materials may be found in Mountville Borough and in portions of the townships of West Hempfield, East Donegal, Hellam and Manor. See Figure 1 for additional details.

Section 4 – Estimate of the Quantity of Eligible Property to be Replaced

Table ~~3~~5 identifies eligible property that is projected to be replaced in the next five years. These quantities were prepared based upon the best available information (planned municipal and utility projects, main break data, pipe age, etc.) at the time this plan was prepared. Actual quantities may vary depending on conditions that could change in the distribution system or changes made by the municipalities to their street projects.

Table ~~3~~5 – Projected Quantities of Eligible Property to be Replaced for 2023 - 2027

Year	Water Main (LF)	Service lines (ea.)	Valves	Hydrants	Meters
2023	1,200	30	5	3	140
2024	1,200	~~30~~50~~30~~	5	3	140
2025	1,200	~~30~~50	5	3	140

2026	1,200	~~30~~50	5	3	140
2027	1,200	~~30~~50	5	3	140

Prior to 2024, the LTIIP contained 30 service line replacements. The Company-owned service lines being replaced were primarily made of lead materials. The Company is now planning to undertake 50 service line replacements, which includes replacing Company-owned and Customer-owned LSLRs, on an annual basis beginning in 2025~~4~~.

Section 5 – Projected Annual Expenditures

The projected annual expenditures for the 2023 to 2027 period are listed in Table ~~4~~6 below. These estimates are based upon the quantities listed in Table ~~3~~5 and recent construction costs. A break down by category is provided in Table ~~5~~7.

Table ~~4~~6 – Projected Annual Expenditures for 2023 - 2027

Year	Projected Annual Expenditures
2023	$280,000
2024	$~~280~~3280,000
2025	$~~280~~380,000
2026	$~~280~~380,000
2027	$~~280~~380,000

Table ~~5~~7 – Projected Annual Expenditures by Category for 2023 - 2027

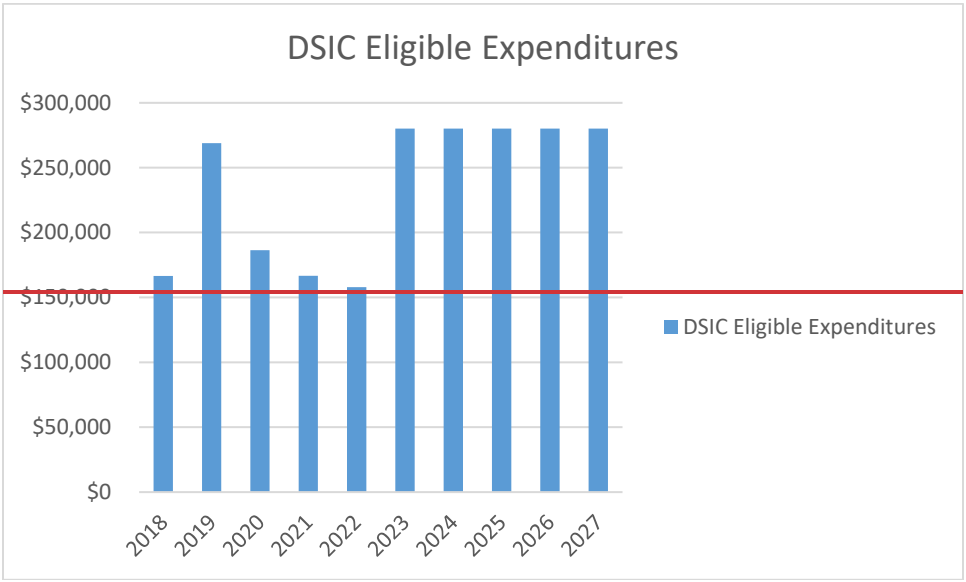
Year	Water Main	Service ~~lines~~Lines	Valves	Hydrants	Meters	Total
2023	$160,000	$45,000	$15,000	$10,000	$50,000	$280,000
2024	$160,000	$~~45~~145,000	$15,000	$10,000	$50,000	$~~280~~3280,000
2025	$160,000	$~~45~~145,000	$15,000	$10,000	$50,000	$~~280~~380,000
2026	$160,000	$~~45~~145,000	$15,000	$10,000	$50,000	$~~280~~380,000
2027	$160,000	$~~45~~145,000	$15,000	$10,000	$50,000	$~~280~~380,000

Prior to 2024, the Company was already investing $45,000 into replacing primarily Company-owned service lines made of lead. The Company is committing to an additional $100,000 for a total of $145,000 for Company-owned and Customer-owned LSLRs beginning in 2025~~4~~. For all projects, the most prudent, cost-effective methods will be used to complete the project. Almost all eligible property is abandoned in place after the replacement infrastructure is installed and therefore is not salvageable. Meters can be salvaged and are sold at local salvage yards.

Section 6 – Acceleration of Infrastructure Replacement

CWC has a track record of investing in its infrastructure to maintain safe and reliable service to all of its customers including infrastructure not eligible for DSIC. Over the past 5 years considerable investment has occurred in major upgrades of its water system including a system-wide security system, four (4) emergency generators, repainted two tanks, and installing a new intake in the Susquehanna River. In addition CWC purchased an adjacent water system that was being operated by part-time contractors.

In addition to the capital expenditures listed above, CWC, through the use of its DSIC, continued to replace water mains, Company-owned service lines, valves, hydrants and meters. Figure 2 graphs the projected and historical DSIC eligible capital expenditures. With the completion of the large projects listed above, additional capital will be directed towards expediting infrastructure replacement.



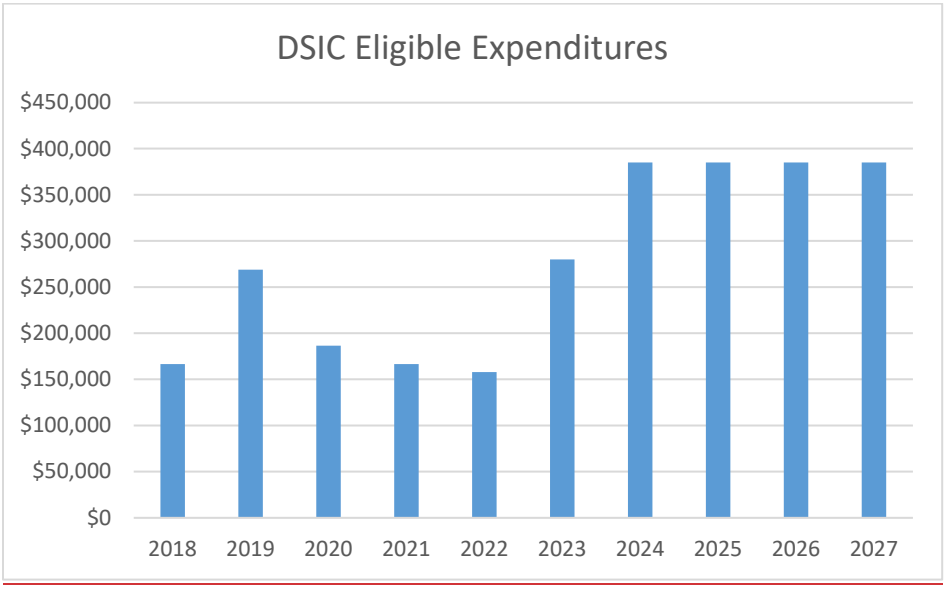


Figure 2 – Projected and Historic DSIC Eligible Expenditures

The projected DSIC eligible expenditures will accelerate the replacement of infrastructure by approximately 80 percent. Moreover, through the Company's LSLR Plan, the Company will make a concerted effort to replace existing LSLs in a timely manner within the time frame set forth in 52 Pa. Code § 65.53(a). The LSLR Plan will take place in conjunction with Columbia Water's other infrastructure investments.

Section 7 – Workforce Management Plan and Training

To ensure system reliability, public safety, quality installation and cost-effectiveness, all DSIC eligible projects will be constructed by qualified personnel. CWC uses a competitive bidding process for the purchase of piping, valves and hydrants. A list of materials is prepared for the project and sent to the four (4) major pipe suppliers for price quotes. CWC utilizes its own staff and equipment for the installation of water mains, ~~company~~Company-owned service lines, Customer-owned service lead service lines, valves, hydrants and meters. Company employees utilized for this type of work have extensive training in the use of heavy equipment, pipe laying procedures, disinfection procedures and safety training. For water mains greater than 12-inches in diameter, stream crossings or expedited Pa DOT projects, CWC uses qualified local contractors for water main, valves and hydrant installations. These local contractors are prequalified based upon experience with similar projects, safety record, and qualifications of personnel. All project sites are inspected regularly throughout the construction process by Company personnel.

Section 8 – Outreach and Coordination with other Utilities

CWC meets annually, and often times more frequently, with the municipalities where it provides pubic water service to coordinate the replacement of water main with the reconstruction and/or repaving of streets and roadways. These meetings often times include the other utilities serving the same areas. CWC coordinates its replacement projects to coincide with other planned roadway and utility work. PaDOT is very effective at notifying utilities well ahead of planned state highway projects making coordination of the work an easy process. In each of the municipalities where CWC provides public water service, public officials have a strong record of planning street projects far enough in advance to allow each of the major utilities to upgrade facilities as necessary.

For each project, CWC coordinates all work with the state or local municipality through planning meetings and the permitting process. In addition, CWC utilizes the PA One Call system to minimize utility conflicts and notifies customers of proposed work with door hangers throughout the construction process.

Section 9 – Lead Service Line Replacement Plan

In accordance with the requirements of 66 Pa. C.S. § 1311 and the Public Utility Commission's Final Rulemaking Order for the Implementation of Act 120 of 2018 (Public Meeting of February 24, 2022, Docket No. L-2020-3019521), CWC is submitting this Lead Service Line Replacement Plan (LSLR Plan). CWC's LSLR Plan addresses the Company's efforts to replace company-owned and customer-owned Lead Service Lines as approved at Docket No. P-2023-_____.

Lead is a heavy metal that commonly occurs in our environment. Humans can be exposed to lead through a variety of sources, including dust, soil, or paint chips, as well as through ingestion from drinking water. The deleterious health effects of lead are now well-recognized. Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.

In October 2018, Governor Wolf signed into law Act 120 of 2018 ("Act 120"), which became effective on December 23, 2018. Act 120 amended Section 1311(b) of the public Utility Code in order to, *inter alia*, authorize water utilities to pursue comprehensive replacement of lead service lines that remain in service across Pennsylvania subject to Commission approval.

Pursuant to Act 120, the Commission promulgated its LSLR Regulations at 52 Pa. Code § 65.51, *et seq*., which became effective on July 23, 2022. 52 Pa. Code § 65.53 states that "[a]n entity…shall remove and replace all LSLs, whether entity-owned or customer-owned, within or connected to its water distribution systems within 25 years from the effective date of this section for a Class A public utility…" 52 Pa. Code § 65.54(a) and 65.55(a) further states that a Class A public utility or authority shall file a Petition for an LSLR Program within 1 year of the effective date of this section, or by July 23, 2023. Moreover, 52 Pa. Code § 65.54(b) requires that the utility shall include with its LSLR Program a modified LTIIP containing a LSLR plan as a separate and distinct component of the entity's LTIIP.

Accordingly, Columbia Water has begun efforts to replace lead service lines in its system, including galvanized materials downstream of a lead service line, as well as any lead pigtail, gooseneck, or other fitting that is connected to a lead service line. This section of the LTIIP will identify how CWC will incorporate its LSLR Plan into its LTIIP to continue replacing aging infrastructure in combination with the replacement of lead service lines.

(1) Identification of types and age of eligible property owned and operated by the utility for which it is seeking DSIC recovery.

A listing of the eligible property, as defined in 66 Pa. C.S. §1351(3), is provided in this section. CWC developed a lead service line inventory to locate, track, and replace company-owned and customer-owned service lines that contain lead, galvanized steel downstream of a lead service line, and lead pigtails, goosenecks, or other fittings connected to lead service lines. Columbia Water is currently working to incorporate the service line Inventory into its GIS to map and manage these assets. This information is supplemented with paper mapping and files as necessary.

CWC owns the following water system components:

Company-Owned Service Lines – Water gets delivered from the water main to the customer's curb stop through a Company-owned, pressurized service line. CWC owns the service line between the water main and the curb stop ("Company-Owned Service Line"). The Company-Owned Service Lines vary in size from 6-inch down to ¾-inch with a majority of CWC's service lines being constructed of copper. Only copper is used when Company-owned service lines are replaced.

The customer owns the following water system components:

Customer-Owned Service lines – The portion of the lead service line extending from the Curb Stop to the meter or one foot inside a building foundation, whichever is farther ("Customer-Owned Service Line"). Generally, any replacement of the Customer-Owned Service Line is the responsibility of the customer. However, Customer-Owned Service Lines are included in this LTIIP only for purposes of the LSLR Plan. The Customer-Owned Service Lines vary in size from 6-inch down to ¾ inch with a majority of Customer-Owned Service Lines being constructed of copper. Copper or plastic is used when Customer-Owned service lines are replaced pursuant to the LSLR Plan.

Table 6 provides a breakdown of the company side materials and customer side materials by type. Table 7 provides a breakdown of the service lines by type and size.

Table 6 – Company Side and Customer Side Materials by Type

Company Side Material		Customer Side Material	
Lead	3	Lead	0
Copper	2921	Copper	712
Unlikely Lead	5921	Unlikely Lead	6477
Unknown	3267	Unknown	4923
Likely Lead	0	Likely Lead	0
Other	16	Other	3
TOTAL	12125	TOTAL	12115

Table 7 – Service Lines by Size and Type

Full Line Classification										
	3/4	1	1 1/2	2	3	4	6	8	Unknown	Total
Lead	3	0	0	0	0	0	0	0	0	3
Non-Lead	3,251	41	35	48	5	3	0	0	1,078	4,461
Lead Status Unknown	7,062	137	31	113	5	25	50	13	229	7,665
Galvanized Requiring Replacement	0	0	0	0	0	0	0	0	0	0
TOTAL	10,316	178	66	161	10	28	50	13	1,307	12,129

Based on the initial inventory, the Company has identified three (3) lead service lines on the company-owned portion of the service line. The Company estimates the total number of lead service lines that will need to be replaced to be less than 400. CWC plans to identify, at a minimum, a cumulative average of 10.0% of the initial unknown service materials annually by means of utilizing existing records, modeling, statistical analysis, and mechanical excavation.

(2) An initial schedule for planned repair and replacement of eligible property.

As part of its broader LTHP efforts, Columbia Water will analyze record reviews of old age mains within the oldest parts of the distribution system to determine which water mains in the distribution system should be replaced. Prior to choosing a target area, the Company's distribution crew will review records and/or physically inspect a portion of the service lines within a proposed area to gauge the likelihood of lead within that area. Coordination with municipalities will take place to minimize costs and minimize impacts on roads and neighborhoods. Once the targeted areas are determined, the projects will be posted on the Columbia Water website at least six (6) months in advance of the work being done. Prior to the work being initiated, Columbia Water staff will reach out to the customers to determine all service line materials within the affected area, and to provide the customers with detailed information regarding the routine procedures and the potential health risks involved.

With respect to replacing LSLs discovered during mechanical excavation, areas with a higher likelihood of having lead service lines will be prioritized for these projects. Columbia Water will physically excavate the service lines to determine material types. If a service line is determined to be lead, coordination will occur with the customer(s) and the property owner to have the service line replaced.

With respect to replacing customer-owned LSLs discovered inside the building, Columbia Water will reach out to the customers with lead, galvanized requiring replacement, or unknown service lines. Customers who discover a lead service line may call and schedule to have their service line replaced. CWC will schedule to replace customer-owned lead service lines. If the company side is lead, it will be replaced at the same time with the customer side. These replacements will occur as discovered.

If a lead service line is leaking or otherwise defective at the time it is discovered, CWC will replace the lead service line in accordance with its tariff. Columbia Water staff will maintain the proper equipment and tools necessary for emergency service line replacements. If a lead service line is discovered during an emergency but is not leaking, the replacement of the line will be scheduled for replacement at a later date.

Determination of LSLR projects under these three procedures will be prioritized based on targeted sensitive populations as defined by the EPA and PADEP, which includes areas with elevated levels of lead in tap water, areas with high concentrations of lead service lines, and/or areas of the distribution system which have elevated corrosion rates. A list of sensitive populations has also been developed to determine the service line materials. The list includes schools, nursing homes, large apartment buildings, churches, and industries. These service lines have been or will be detailed as sensitive populations in the Service Line Inventory. Homes with multiple meters and multiple family residents will also be prioritized to determine service line material.

Columbia Water intends to replace LSLs using existing routes through a combination of pipe splitting and/or pipe pulling. This approach removes or displaces existing pipe while simultaneously replacing it with a new pipe and is the preferred method under normal circumstances. Columbia Water may also utilize guided boring to install new pipe along a different route or using open trench excavation to remove replace the pipe. The appropriate replacement technique will depend on a combination of many site-specific characteristics, including, but not limited to, time constraints, soil characteristics, depth to ground water or rock, depth of road foundation, condition of the service line, proximity of other utility services (e.g., electric, gas, cable, sewer, storm water), site conditions (e.g., access, parking, paving, landscaping, overhead obstructions), pipe conditions (e.g., length of pipe, pipe diameter and wall thickness, bury depth, configuration, and repair history, and conditions inside the home like a finished basement with limited access to the water meter and plumbing. All new pipe installation will be copper or plastic.

(3) A general description of location of eligible property.

The areas with lead service lines are more specifically found on houses built prior to 1950 with water mains older than 1970 within Columbia Borough and Marietta Borough. Though lead service line materials may be found in Mountville Borough and in portions of the townships of West Hempfield, East Donegal, Hellam and Manor. See Figure 1 for additional details.

(4) A reasonable estimate of quantity of eligible property to be improved or repaired.

CWC plans to replace approximately 50 lead service lines per year. This projection was determined by estimating the total number of lead service lines to be less than 400. After all existing records have been inventoried, CWC will review this annual projection and adjust it as necessary.

(5) Projected annual expenditures and means to finance the expenditures.

The projected annual investment in lead service line replacements ("LSLR") is approximately $250,000. Table 8 identifies the number and cost of lead service lines that are projected to be replaced in the next five years.

Table 8 – Projected Number and Cost Associated with Lead Service Line Replacements

Year	Projected Number of Lead Service Line Replacements	Projected Annual Expenditures
2024	50	$250,000
2025	50	$250,000
2026	50	$250,000
2027	50	$250,000
2028	50	$250,000

The cost incurred by Columbia Water for LSLRs will be funded with a combination of commercial loans, cash from operations, and/or loans issued by the Pennsylvania Infrastructure Investment Authority.

(6) A description of the manner in which infrastructure replacement will be accelerated and how repair, improvement or replacement will ensure and maintain adequate, efficient, safe, reliable and reasonable service to customers.

Through the Company's LSLR Plan, the Company will make a concerted effort to replace existing lead service lines in a timely manner within the time frame set forth in 52 Pa. Code § 65.53(a). The LSLR Plan will take place in conjunction with Columbia Water's other infrastructure investments.

(7) A workforce management and training program designed to ensure that the utility will have access to a qualified workforce to perform work in a cost-effective, safe and reliable manner.

As with its other DSIC-eligible projects, lead service line replacements will be completed by qualified personnel. Columbia Water will use a competitive bidding process for the purchase of the necessary materials. A list of the materials will be prepared and sent to the four (4) major pipe suppliers for price quotes. CWC will then utilize its own staff and equipment for the installation of company-owned and customer-owned service lines. Company employees utilized for this work will have extensive training in the use of heavy equipment, pipe laying procedures, disinfection procedures and safety training. Qualified local contractors may be used for some projects depending on the level of work involved. Local contractors are prequalified based upon experience with similar projects, safety record, and qualifications of personnel. All project sites will be inspected regularly throughout the construction process by Company personnel.

~~(8) A description of a utility's outreach and coordination activities with other utilities, Department of Transportation and local governments regarding the planned maintenance/construction projects and roadways that may be impacted by the LTIIP.~~

~~With its other DSIC-eligible projects, CWC meets annually, and often times more frequently, with the municipalities where it provides public water service to coordinate the replacement of water main with the reconstruction and/or repaving of streets and roadways. These meetings often times include the other utilities serving the same areas. CWC also coordinates its replacement projects to coincide with other planned roadway and utility work. The Pennsylvania Department of Transportation is very effective at notifying utilities well ahead of planned state highway projects making coordination of the work an easy process. In each of the municipalities where CWC provides public water service, public officials have a strong record of planning street projects far enough in advance to allow each of the major utilities to upgrade facilities as necessary. CWC will use these meetings and processes as an opportunity to identify lead service lines replacements that can be done in conjunction with other DSIC-eligible projects.~~

~~For each project, CWC coordinates all work with the state or local municipality through planning meetings and the permitting process. In addition, CWC utilizes the PA One Call system to minimize utility conflicts and notifies customers of proposed work with door hangers throughout the construction process.~~

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true copy of the foregoing document upon the parties, listed below, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a party).

BY ELECTRONIC MAIL ONLY:

Harrison W. Breitman, Esquire
Patrick M. Cicero, Esquire
Office of Consumer Advocate
555 Walnut Street
5th Floor Forum Place
Harrisburg, PA 17101
HBreitman@paoca.org
pcicero@paoca.org

Allison C. Kaster, Esquire
Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120
akaster@pa.gov

Steven C. Gray, Esquire
Rebecca Lyttle, Esquire
Small Business Advocate
Pennsylvania Office of Small Business Advocate
555 Walnut Street, 1st Floor
Forum Place Harrisburg, PA 17101
sgray@pa.gov
relyttle@pa.gov

/s/ Whitney E. Snyder
Whitney E. Snyder
Thomas J. Sniscak

Dated this 18th of November, 2024.