

FILED
August 20, 2021
INDIANA UTILITY
REGULATORY COMMISSION

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

**VERIFIED PETITION OF THE BOARD OF)
DIRECTORS FOR UTILITIES OF THE)
DEPARTMENT OF PUBLIC UTILITIES OF THE CITY)
OF INDIANAPOLIS, AS TRUSTEE OF A PUBLIC)
CHARITABLE TRUST FOR THE WATER SYSTEM)
D/B/A CITIZENS WATER FOR APPROVAL OF A)
LEAD SERVICE LINE REPLACEMENT PLAN)
PURSUANT TO IND. CODE CH. 8-1-31.6)**

CAUSE NO. 45599

**VERIFIED DIRECT TESTIMONY
of
DAN MORAN**

**On
Behalf of
Petitioner,**

CITIZENS WATER

Petitioner's Exhibit No. 1

1 **INTRODUCTION AND BACKGROUND**

2 **Q1. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A1. My name is Dan Moran. My business address is 2150 Dr. Martin Luther King Jr. Street,
4 Indianapolis, Indiana, 46202.

5 **Q2. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

6 A2. I am employed by the Board of Directors for Utilities of the Department of Public Utilities
7 of the City of Indianapolis, which does business as Citizens Energy Group ("Citizens
8 Energy Group"). I currently serve as Director of Water Quality, System Control &
9 Planning. Citizens Energy Group owns the water utility that does business as Citizens
10 Water and provides water utility service to residential, commercial, industrial, and
11 wholesale customers in the City of Indianapolis and neighboring communities. Citizens
12 Water is the Petitioner in this proceeding and is referred to interchangeably in my testimony
13 as "Citizens Water" and "Petitioner."

14 **Q3. PLEASE DESCRIBE THE DUTIES AND RESPONSIBILITIES OF YOUR**
15 **PRESENT POSITION.**

16 A3. I am responsible for leading the Water Operations technical area with responsibilities for
17 ensuring appropriate water quality controls, control of finished water transmission
18 operations, and for various water supply and demand planning activities. I also have
19 responsibilities for various operations support personnel who conduct a variety of functions
20 including chemical inventory management, standard operating procedure documentation
21 control, and operational database management. Additionally, I am responsible for many

1 technical evaluations and plans within the production department, including both water
2 quality and water supply evaluations.

3 **Q4. HOW LONG HAVE YOU BEEN EMPLOYED BY CITIZENS ENERGY GROUP?**

4 A4. I have been employed by Citizens Energy Group since 2011.

5 **Q5. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL**
6 **BACKGROUND.**

7 A5. I have a bachelor's degree in Mechanical Engineering from the University of Notre Dame
8 (1985) and a master's degree in Civil Engineering from the University of Texas at Austin
9 (1992). Additionally, I am an Indiana registered Professional Engineer and a licensed
10 Indiana Grade WT-3 and WT-5 Water Treatment Plant Operator.

11 **Q6. PLEASE DESCRIBE YOUR PRIOR BUSINESS EXPERIENCE.**

12 A6. I have worked in engineering capacities since graduation, including work in the design and
13 operation of soil and groundwater remediation systems and industrial environmental
14 remediation and compliance for environmental consulting companies (Hargis and
15 Associates, La Jolla, California; and Earth Tech, Indianapolis, Indiana). I began work with
16 the Indianapolis Water Company in 1998 and later transitioned to employment with Veolia
17 Water Indianapolis, LLC ("Veolia"). I left Veolia in 2006 to work on a volunteer
18 humanitarian aid project in Guatemala, Central America for two (2) years, where I worked
19 on an integrated watershed management project in an economically depressed area in the
20 Guatemalan highlands. I began working at Veolia Water North America upon my return
21 from Guatemala in January 2009, where I remained until transition to Citizens Energy
22 Group in 2011. While at Citizens Energy Group, I have held positions of increasing

1 responsibility within Water Operations. I served as Water Quality Manager until 2016
2 when I was promoted into my current position as Director of Water Quality, System
3 Control & Planning.

4 **Q7. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?**

5 A7. Yes. I testified for Veolia on behalf of the Department of Waterworks for the City of
6 Indianapolis ("Department") in Cause No. 43645, which was a general rate case for the
7 Department. Specifically, I testified in support of the 2009 Water Conservation Plan. I
8 also filed testimony on behalf of Citizens Water in Cause Nos. 44240 and 44392 in support
9 of Petitioner's Water Wise Plan and Drought Management Plan, respectively.

10 **Q8. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

11 A8. The purpose of my testimony is to sponsor, support, and seek approval of Petitioner's Lead
12 Service Line Replacement Plan ("LSLR Plan" or "Plan"). In particular, I provide a general
13 overview of the current status of lead service line regulations, why Petitioner is proposing
14 its LSLR Plan, the current lead service line situation in Petitioner's service area, and the
15 components of Petitioner's LSLR Plan. I then conclude with why Commission approval
16 of Petitioner's LSLR Plan is in the public interest.

17 **Q9. WHAT HAVE YOU DONE TO PREPARE YOURSELF TO TESTIFY IN THIS**
18 **PROCEEDING?**

19 A9. I, along with Petitioner's witness Andy Lutz, Director of Program & Technical Services, led the
20 efforts in preparing the LSLR Plan, including establishing the Plan components, budget, and the
21 documents associated with the Plan. I have also reviewed lead service line replacement plans of
22 other utilities. Additionally, as part of my job responsibilities, I help ensure Petitioner's compliance

1 with the United States Environmental Protection Agency's ("EPA") Lead and Copper Rule. As a
2 part of that, I have been reviewing and monitoring the impending revisions to the Lead and Copper
3 Rule and how those changes may impact Petitioner.

4 **Q10. ARE YOU SPONSORING ANY ATTACHMENTS TO YOUR TESTIMONY?**

5 A10. Yes. I am sponsoring the following attachments:

- 6 • Petitioner's Attachment DM-1 – the petition in this proceeding; and
- 7 • Petitioner's Attachment DM-2 – Petitioner's proposed LSLR Plan.

8 **Q11. WHAT ARE THE FEDERAL REQUIREMENTS REGARDING LEAD SERVICE**
9 **LINES?**

10 A11. In 1991, the EPA issued the Lead and Copper Rule as a federal regulation that limited the
11 concentrations of lead and copper allowed in public water supplies, as measured at the
12 customer's tap. This regulation differs from many others in that lead and copper
13 concentrations often are present due to the customer's service line and plumbing materials
14 and not the utility's source water or treatment process. The existing Lead and Copper Rule
15 has an action level for lead of 0.015 milligrams per liter (mg/L) based on the 90th percentile
16 of tap sample lead results. Specific high-risk locations are identified for monitoring and
17 sampling, and if more than 10 percent of samples exceed the action level, the rule requires
18 utilities to take additional specific actions, including investigation of the cause of the
19 exceedance, water treatment options, public education and the removal of lead service
20 lines. However, on January 15, 2021, revisions to the Lead and Copper Rule were
21 published in the Federal Register, which means that changes to the Lead and Copper Rule
22 will be forthcoming as further described below.

1 **Q12. HAVE SAMPLE RESULTS ON PETITIONER'S WATER SYSTEM EVER**

2 **EXCEEDED THE 90TH PERCENTILE ACTION LEVEL?**

3 A12. No.

4 **Q13. HAS THE EPA PROVIDED SUPPORT FOR CHANGES MADE TO THE LEAD**

5 **AND COPPER RULE?**

6 A13. Yes. For example, in a 2016 white paper provided for the Lead and Copper Rule changes,
7 the EPA stated that lead service line replacement presents substantial economic, legal,
8 technical, and environmental justice challenges, because, among other things, replacing
9 lead service lines is costly and lead service lines are often partially or totally owned by
10 private homeowners (EPA, Lead and Copper Rule Revisions White Paper, October 2016).
11 Under the current Lead and Copper Rule, public water systems are only responsible for
12 replacing that portion of the lead service line that it owns, which is typically the portion of
13 the line from the water main to the property line. The paper provides, "To the extent water
14 systems rely on homeowners to pay for replacement of privately owned portions of lines,
15 there are concerns about consumer's [sic] ability to pay and the possibility that lower-
16 income homeowners will be unable to replace the lines, resulting in disparate levels of
17 protection."

18 **Q14. CAN YOU SUMMARIZE KEY CHANGES TO THE LEAD AND COPPER RULE?**

19 A14. The Lead and Copper Rule revisions introduce a variety of new requirements, including
20 introduction of a new "Trigger Level" for lead of 0.010 mg/L based on the 90th percentile
21 tap sample results, revisions to the tap sample collection procedures, compilation and
22 publication of service line material inventories, enhanced public communication of health

1 risks associated with lead, development of a school and childcare testing program, and
2 development of a lead service line replacement program. The compliance date of these
3 revisions was originally provided as January 16, 2024. However, after the change in
4 presidential administrations, the EPA subsequently has announced an extension to the rule
5 compliance date to allow additional time for public input into the rule and consideration of
6 potential rule modifications.

7 **Q15. HAS THE STATE TAKEN STEPS TO FACILITATE LEAD SERVICE LINE**
8 **REPLACEMENTS?**

9 A15. Yes. In 2017, the Indiana General Assembly enacted HEA 1519, allowing the Commission
10 to approve a public utility's request to replace customer owned lead service lines and
11 recover a return of and on the investments to replace these lines, even though they are not
12 owned by the utility. The bill was signed by the Governor and codified into law as Ind.
13 Code § 8-1-31.6. In 2020, the law was amended to also apply to municipally owned
14 utilities. To qualify for cost recovery of customer owned lead service lines, municipally
15 owned utilities, like public utilities, are also required to submit a lead service line
16 replacement plan to the Commission that contains the ten statutory elements in Ind. Code
17 § 8-1-31.6-6(a). If a municipally owned utility receives such approval of its plan, it can
18 then, as further described in Petitioner's witness Bardhan-Akala's testimony, petition the
19 Commission for a rate adjustment pursuant to Ind. Code § 8-1-31.6-9 to recover the costs
20 of the plan, including depreciation expenses, extensions and replacements for customer
21 lead service line improvements in excess of depreciation, debt service on funds borrowed

1 to pay for customer lead service line improvements, and as applicable, property taxes to be
2 paid by the utility for customer lead service line improvements.

3 **Q16. WHY IS PETITIONER PROPOSING A LEAD SERVICE LINE REPLACEMENT**
4 **PLAN AT THIS TIME?**

5 A16. At a fundamental level, it is the right thing to do. According to the EPA and Center for
6 Disease Control, lead exposure is harmful, especially for children, and the only way to
7 eliminate the potential risk of lead exposure caused by lead service lines is to eliminate the
8 lead service lines themselves. Additionally, the concentration of lead service lines in
9 Petitioner's service area is located in areas that have an older housing stock, which typically
10 have a higher concentration of low-income customers. Further, by proposing its LSLR
11 Plan now, Petitioner is proactively aligning itself with the polices and regulations of the
12 federal government and the State of Indiana, including the Indiana General Assembly.
13 While the Lead and Copper Rule revisions are under further review, we want to take the
14 steps now using the framework established by Ind. Code § 8-1-31.6 to make sure we are in
15 compliance with those revisions as opposed to reacting to them later.

16 **Q17. DOES PETITIONER'S LSLR PLAN MEET THE REQUIREMENTS NEEDED**
17 **FOR APPROVAL PURSUANT TO IND. CODE § 8-1-31.6-6(a)?**

18 A17. Yes. All of those elements are addressed in Petitioner's LSLR Plan itself as well as in my
19 testimony and the testimony of Mr. Lutz. In particular, I address the items found in Ind.
20 Code § 8-1-31.6-6(a)(2), (3), and (4). Mr. Lutz addresses the items found in Ind. Code §
21 8-1-31.6-6(a)(1),(5),(6),(7),(8),(9), and (10). Additionally, Ms. Bardhan-Akala testifies

1 about how and when, following this proceeding, Petitioner plans to petition for a rate
2 adjustment in accordance with the requirements found in Ind. Code § 8-1-31.6.

3 **Q18. IN ACCORDANCE WITH IND. CODE § 8-1-31.6-6(a)(4), HOW MANY LEAD**
4 **SERVICE MAINS AND WATER LINES ARE ESTIMATED TO BE PART OF**
5 **PETITIONER'S WATER SYSTEM?**

6 A18. There are no lead mains in Petitioner's Water System. The Water System has
7 approximately 370,000 service line connections, which includes both active and inactive
8 services. The majority of these service lines were added to the system after lead piping
9 was banned in 1948 and therefore were installed with other plumbing materials. Prior to
10 1948, service lines consisted of lead, iron, and copper, or combinations of these materials.
11 The Indianapolis water system in 1948 included all of Center Township and adjacent areas
12 in the surrounding townships. Based on an analysis of service line records, it is estimated
13 that there are approximately 55,000 service lines within this area that contain at least some
14 portion of lead pipe. However, since service lines are privately owned and were installed
15 and potentially modified over many decades, the service line material records transferred
16 to Citizens Water were incomplete. For these reasons, it is expected that Citizens Water
17 may need to inspect as many as 75,000 services to verify material types to ensure that all
18 lead service lines are identified. As additional information on service line materials is
19 gained through implementation of the Plan, it is expected that the accuracy of the total
20 estimated number of lead service lines will be improved.

21 **PROGRAM COMPONENTS**

22 **Q19. WHAT IS THE GOAL OF PETITIONER'S LSLR PLAN?**

1 A19. Petitioner's LSLR Plan integrates lead service line replacements with Petitioner's utility
2 processes and expands the scope and process to achieve the goal of full lead service line
3 replacement for each affected customer, including those portions of the service line located
4 on private property.

5 **Q20. IN ACCORDANCE WITH IND. CODE § 8-1-31.6-6(a)(2), PLEASE DESCRIBE**
6 **HOW THE REPLACEMENT OF CUSTOMER OWNED LEAD SERVICE LINES**
7 **WILL BE ACCOMPLISHED IN CONJUNCTION WITH DISTRIBUTION**
8 **INFRASTRUCTURE REPLACEMENT PROJECTS.**

9 A20. Petitioner's LSLR Plan has the following four (4) primary components to achieve the long-
10 term goal of eliminating lead service lines:

- 11 1. Capital Improvement Projects and Emergency Repair Lead Service Line
12 Replacements;
- 13 2. Pro-active Lead Service Line Replacements;
- 14 3. Property Owner-Initiated Lead Service Line Replacements; and
- 15 4. Abandoned/Inactive Service Line Termination.

16 I will describe each of those components in more detail below.

17 **Q21. PLEASE EXPLAIN THE COMPONENT OF THE PLAN RELATED TO CAPITAL**
18 **IMPROVEMENT PROJECTS AND EMERGENCY REPAIRS.**

19 A21. Citizens Water conducts work on service lines as a part of normal utility operations
20 involved with capital improvement projects and emergency repairs. Capital improvement
21 projects impacting service lines include main replacements and relocations. Emergency
22 repairs of service lines may be required due to main breaks and service line leaks in the

1 right of way. Historically, these activities were limited to work on the portion of the service
2 line within the public right of way. The proposed LSLR Plan would expand the current
3 process in conjunction with capital improvements and emergency repairs to include the full
4 replacement of lead service lines, including any galvanized iron components downstream
5 of a lead service line, from the water main to the home. This includes portions of the
6 service line located both in the public right of way and on private property. During
7 emergency repairs requiring service to be restored quickly to prevent additional damage,
8 the repairs may be made and the complete replacement may be rescheduled with the
9 property owner. The replacement of the portion of the lead service line on private property
10 is subject to property owner approval, but would be done at no incremental cost to the
11 property owner or customer.

12 **Q22. PLEASE DESCRIBE THE PRO-ACTIVE LEAD SERVICE LINE**
13 **REPLACEMENT COMPONENT.**

14 A22. Under this component of the LSLR Plan, full lead service line replacements will be
15 completed on non-leaking lead service lines or lead service lines connected to mains that
16 are not at the end of their useful life or planned for repairs, provided the property owner
17 agrees to the replacement of the service line on their property. This component is expected
18 to be the largest component of the Plan and is essential to achieve the goal of eliminating
19 lead service lines in the system.

20 **Q23. UNDER THE PRO-ACTIVE COMPONENT, HOW WILL LEAD SERVICE LINES**
21 **BE PRIORITIZED FOR REPLACEMENT?**

1 A23. Given the significant number of potential service lines for replacement within the system,
2 the proactive process will prioritize areas/neighborhoods based on a matrix of factors,
3 including utility asset data, water quality and health risks, neighborhood economic impacts,
4 and coordination with other infrastructure work, such as road or public improvement
5 projects. Project areas will be identified based on alignment of the highest priority areas
6 with the anticipated funding levels.

7 **Q24. WILL PROPERTY OWNERS NOT ON THE PRIORITY LIST BE ABLE TO**
8 **REQUEST A LEAD SERVICE LINE REPLACEMENT?**

9 A24. Yes, property owners in areas that have not yet been prioritized will be eligible for partial
10 assistance in replacing their lead service line. As a part of the property owner-initiated
11 component of the Plan, property owners will have two options for replacing their service
12 line: 1) the property owner can hire their own contractor to replace the portion of the service
13 line on private property and the Petitioner will replace the portion in the public right of
14 way, or 2) the Petitioner can replace the entire service line under an agreement that the
15 property owner would pay for the cost of the portion on private property. Under both
16 options, the Petitioner will fund the portion of the replacement in the public right of way,
17 but the property owner will be required to fund replacement of the portion of the service
18 line on private property.

19 **Q25. HOW WILL PETITIONER ADDRESS INACTIVE/ABANDONED SERVICE**
20 **LINES?**

21 A25. Under this component, Petitioner will continue to follow existing policies of terminating
22 service lines under the following circumstances:

- 1 ○ a property wrecking order is issued;
- 2 ○ abandoned properties with no serviceable structure are identified as part of other
- 3 utility work.

4 In 2020, these policies resulted in the termination of over 300 lead service lines.

5 **Q26. AS CONTEMPLATED BY IND. CODE § 8-1-31.6-6(a)(3), WILL IT BE MORE**
6 **COST EFFECTIVE FOR PETITIONER TO REPLACE LEAD SERVICE LINES**
7 **UNDER ITS LSLR PLAN THAN FOR PROPERTY OWNERS TO REPLACE THE**
8 **PORTION OF THE LEAD SERVICE LINES OWNED BY THEM?**

9 A26. Petitioner anticipates that its average cost of replacing a service line will be approximately
10 \$7,475. That cost includes the following activities: planning and scheduling efforts for the
11 water service line replacement; installing a new water service line and retiring the lead
12 service line; coordinating the flushing and sampling of the property owner's water after
13 construction; restoring the construction site; and general coordination and administration.
14 Petitioner anticipates that its performance of the work will result in a savings of up to 25%
15 as compared with the property owner managing the work. This estimated savings amount
16 was determined based on estimates for Petitioners' maintenance crews to perform the work,
17 as well as based on discussions with contractors having extensive experience with
18 conducting lead service line replacements in other communities. The savings are primarily
19 due to reduced mobilization and demobilization efforts, bulk material purchasing, crew
20 efficiencies in completing replacements, and administrative efficiencies. Further,
21 Petitioner's estimate of a savings of up to 25% is consistent with the estimate provided by

1 Indiana-American Water Company in filing its Lead Service Line Replacement Program.

2 See, Cause No. 45043, Petitioner's Exhibit No. 2, Attachment SSH-1, pp. 16-17.

3 **CONCLUSION**

4 **Q27. IN YOUR OPINION, IS PETITIONER'S LSLR PLAN IN THE PUBLIC**
5 **INTEREST?**

6 A27. Yes. There are a significant number of customer-owned lead service lines in Petitioner's
7 Water System. The goal of Petitioner's LSLR Plan is to eliminate lead service lines in the
8 Water System, thereby reducing any potential risks that they present. Under its LSLR
9 Plan, Petitioner will be able to utilize economies of scale and its professional expertise to
10 replace lead service lines more cost effectively and efficiently than if property owners were
11 to replace them, which will also avoid interference with Petitioner's water main
12 construction and replacement activities. Finally, the proposed Plan is consistent with the
13 goals and requirements specified in the impending Lead and Copper Rule revisions.

14 **Q28. DOES THAT CONCLUDE YOUR DIRECT TESTIMONY?**

15 A28. Yes.

VERIFICATION

The undersigned affirms under the penalties for perjury that the foregoing testimony is true to the best of his knowledge, information and belief.



Dan Moran

BEFORE THE

INDIANA UTILITY REGULATORY COMMISSION

**VERIFIED PETITION OF THE BOARD OF)
DIRECTORS FOR UTILITIES OF THE)
DEPARTMENT OF PUBLIC UTILITIES OF THE)
CITY OF INDIANAPOLIS, AS TRUSTEE OF A)
PUBLIC CHARITABLE TRUST FOR THE WATER)
SYSTEM D/B/A CITIZENS WATER FOR APPROVAL)
OF A LEAD SERVICE LINE REPLACEMENT PLAN)
PURSUANT TO IND. CODE CH. 8-1-31.6)**

CAUSE NO. 45599

VERIFIED PETITION

The Board of Directors for Utilities of the Department of Public Utilities of the City of Indianapolis, as Trustee of a Public Charitable Trust for the Water System d/b/a Citizens Water (“Citizens Water” or “Petitioner”), respectfully requests approval of its plan for the replacement of the customer owned portion of the lead service lines within or connected to Citizens Water’s system (the “Lead Service Line Replacement Plan” or “Plan”). In support of this Verified Petition, Petitioner states as follows:

Petitioner’s Characteristics

1. Petitioner is the Board of Directors for Utilities of the Department of Public Utilities of the City of Indianapolis, as Trustee of a Public Charitable Trust for the Water System d/b/a Citizens Water. Petitioner owns and operates certain water utility assets acquired from the City of Indianapolis, Indiana (the “City”) and the Department of Waterworks (the “DOW”) of the City pursuant to an Asset Purchase Agreement approved by the Commission’s July 13, 2011 Order in Cause No. 43936. By means of the foregoing water utility plant, properties, equipment, and facilities, Citizens Water provides water utility service to the public in the City of Indianapolis and surrounding communities in Central Indiana. Its principal office is located at 2020 North Meridian Street, Indianapolis, Indiana 46202.

2. Citizens Water is subject to the jurisdiction of the Commission in the manner and to the extent provided by the laws of the State of Indiana, including with respect to the establishment of rates and charges pursuant to Ind. Code § 8-1-11.1-3(c)(9).

3. As provided under Ind. Code § 8-1-31.6-4, Citizens Water is a municipally-owned utility (as defined in Ind. Code § 8-1-2-1(h)) that provides water service to the public and is subject to the Commission's jurisdiction with respect to rates and charges.

Customer Owned Lead Service Line Replacement Statute

4. Indiana Code ch. 8-1-31.6 authorizes the Commission to approve a water utility's plan for the replacement of the customer owned portion of the lead service lines within or connected to the water utility's system. The statute allows a municipal water utility to recover through the utility's rates the costs for customer lead service line improvements. Customer lead service line improvements are defined as expenditures: (i) related to a lead service line owned by a customer of a water utility, (ii) made by a water utility, and (iii) related to a water utility's plan to replace lead service lines within or connected to the water utility's system, including lines owned by the customer and lines owned by the water utility. Ind. Code § 8-1-31.6-2.

5. Upon the Commission's approval of a water utility's plan under Ind. Code § 8-1-31.6-6 and subject to the limitations of Ind. Code § 8-1-31.6-6(c), a municipally-owned utility may include in the utility's rates the costs for customer lead service line improvements that: (i) are made, or are to be made, by the utility; (ii) do not increase revenues by connecting to new customers, even though the plant or equipment may provide the municipally-owned utility with available capacity greater than the available capacity provided to the customer before the line improvements; (iii) are or will be an extension or replacement; and (iv) were not included on the utility's balance sheet as plant in service in the utility's most recent general rate case.

6. For a municipally-owned utility, customer lead service line improvement costs include the following: (i) depreciation expenses; (ii) extensions and replacements for customer lead service line improvements, to the extent that the extensions and replacements are not provided for through depreciation, in the manner provided for in Ind. Code § 8-1.5-3-8; (iii) debt service on funds borrowed to pay for customer lead service line improvements; and (iv) as applicable, property taxes to be paid by the utility based upon the first assessment date following the placement in service of the customer lead service line improvements.

7. The Commission shall approve the water utility's lead service line replacement plan if it finds the plan addresses the requirements included within Ind. Code § 8-1-31.6-6(a) and is reasonable and in the public interest. Ind. Code § 8-1-31.6-6(a) and (b).

8. The Commission is required to issue its final order on a Petition setting forth a water utility's Lead Service Line Replacement Plan not later than 210 days after the filing of Petitioner's case-in-chief. Ind. Code § 8-1-31.6-5(c).

Petitioner's Proposed Lead Service Line Replacement Plan

9. Citizens Water developed a Lead Service Line Replacement Plan setting forth its holistic plan to address the legacy of lead service lines serving customers on the Citizens Water system. Based on an analysis of Citizens Water's service line records, it is estimated that there are approximately 55,000 service lines within Citizens Water's service territory that contain at least some portion of lead pipe. Citizens Water's Plan will include: (i) replacing customer owned lead water service lines along with scheduled water main replacement and relocation projects and completing unscheduled or emergency service line replacements; (ii) pro-active prioritized replacement of non-leaking lead service lines connected to mains not at the end of their useful life and not scheduled for replacement; (iii) completing property owner initiated lead service line

replacements; and (iv) identifying and disconnecting/removing lead service lines where a wrecking order is issued or the property is abandoned with no serviceable structure.

10. Petitioner's Plan was developed in compliance with the statutory requirements set forth in Ind. Code ch. 8-1-31.6 and addresses each of the factors set forth therein.

11. Citizens Water will be contemporaneously filing testimony and evidence as its case-in-chief with this Petition, which will include the Plan along with further descriptions of the Plan and the process and timing for obtaining cost recovery in accordance with Ind. Code § 8-1-31.6-10.

Procedural Matters

12. Publication of Notice of Filing. Petitioner is publishing notice of filing this Petition in a newspaper of general circulation published in each county in which Petitioner provides service. Petitioner will late-file the notice as an exhibit in this Cause.

13. Applicable Statutory Provisions. The provisions of Ind. Code ch. 8-1-31.6, among others, are applicable to the subject matter of this Petition.

14. Attorneys for the Petitioner. The names and addresses of Citizens Water's attorneys in this matter, to whom all correspondence and communications in this Cause should be sent, are:

Lauren Toppen, Atty. No. 23778-49
Citizens Water
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Indianapolis, IN 46202
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kelly.beyrer@icemiller.com

Said attorneys are counsel for Citizens Water and are duly authorized to accept service of papers in this Cause on behalf of Citizens Water. In addition, papers filed in this proceeding should be

served on:

Debi Bardhan-Akala
Director, Regulatory Affairs
Citizens Energy Group
2020 N. Meridian Street
Indianapolis, IN 46202
Telephone: (317) 927-4591
Facsimile: (317) 927-4591
Email: dbardhan-akala@citizensenergygroup.com

15. Procedural Schedule. To facilitate Petitioner's ability to proceed with the Plan and ensure an Order within 210 days as provided for in Ind. Code § 8-1-31.6-5, Petitioner requests that the Commission approve the following procedural schedule agreed upon by Petitioner and the Indiana Office of Utility Consumer Counselor ("OUCC") and dispense with conducting a prehearing conference:

Date	Event
August 20, 2021	Petitioner Files Case-in-Chief
October 21, 2021	OUCC/Intervenors File Cases-in-Chief
November 3, 2021	Petitioner Files Rebuttal Testimony
November 17, 2021	Evidentiary Hearing
December 1, 2021	Petitioner Submits Proposed Order
December 22, 2021	OUCC/Intervenors Submit Proposed Order
January 6, 2022	Petitioner Submits Reply to Proposed Order[s]

Discovery will be conducted on an informal basis with responses due within ten (10) calendar days until the OUCC files its case-in-chief. During this time period, discovery served after noon EST will be deemed received on the following business day. After the OUCC files its case-in-chief, discovery responses will be due within four (4) business days.

WHEREFORE, Citizens Water respectfully requests that the Commission make an investigation and hold such hearings as it shall deem necessary and advisable in this proceeding and thereafter make and enter an Order in this Cause:

- (i) approving Petitioner's Lead Service Line Replacement Plan;

- (ii) approving the procedural schedule agreed to among Petitioner and the OUCC; and
- (iii) granting such other and further relief as the Commission may deem necessary and appropriate in the premises.

[Signature page follows]

DATED this 19th day of August 2021.

BOARD OF DIRECTORS FOR UTILITIES OF THE
DEPARTMENT OF PUBLIC UTILITIES OF THE CITY OF
INDIANAPOLIS, AS TRUSTEE OF A PUBLIC CHARITABLE
TRUST FOR THE WATER SYSTEM, D/B/A CITIZENS WATER

By: 

Jeffrey A. Willman, Vice President Water Operations

VERIFICATION

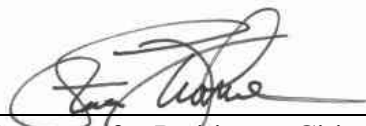
The undersigned affirms under the penalties for perjury that the foregoing representations are true to the best of his knowledge, information and belief.



Jeffrey A. Willman, Vice President Water Operations

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing “Verified Petition” was served on the Indiana Office of Utility Consumer Counselor by email to dlevay@oucc.IN.gov and infomgt@oucc.IN.gov this 19th day of August 2021.



An Attorney for Petitioner, Citizens Water

Lauren Toppen, Atty. No. 23778-49
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Lead Service Line Replacement Plan

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Section I Purpose and Background

The Lead Service Line Replacement Plan (“LSLR Plan” or “Plan”) described herein was developed by Citizens Water (“Citizens”) to provide a holistic approach to address the legacy of lead service lines. This Plan includes multiple components that work toward the goal of eliminating identified or known customer owned lead service lines, both in the right-of-way and on private property.¹ Achieving the goal of eliminating these lead service lines requires a multi-decade approach, as outlined by the Plan in this document.

In 1991, the U.S. Environmental Protection Agency (“U.S. EPA”) issued the Lead and Copper Rule (“LCR”) as a federal regulation that limited the concentrations of lead and copper allowed in public water supplies, as measured at the customer’s tap. This regulation marked an important milestone in addressing lead exposure because it accounted for the fact that lead and copper concentrations often are present due to the customer’s service line and plumbing materials on the customer’s property, not the utility’s source water, distribution system or treatment processes.

The existing LCR has an action level for lead of 0.015 milligrams (mg) / Liter (L), based on the 90th percentile of tap sample lead results. Specific high risk locations are identified for monitoring and sampling, and if more than 10% of samples exceed the action level, then the rule requires utilities to take additional specific actions, including investigation of the cause of the exceedance, water treatment options, public education, and the removal of lead service lines.



Numerous tap sampling surveys have been conducted on the Indianapolis water system since 1991. In each survey, the results for the 90th percentile lead concentration were below the action level. As such, Indianapolis was never triggered into a mandatory lead service line replacement program under the existing LCR.

In October 2016, the U.S. EPA published updated guidance in "Lead and Copper Rule Revisions White Paper," which acknowledged the substantial economic, legal, technical, and environmental justice challenges surrounding lead service line replacement (“LSLR”):

¹ Under Citizens’ Terms and Conditions for Water Service, the service line (defined therein as the Service Pipe) “shall be installed and owned by the Customer” and once installed, the Customer (or property owner) remains responsible for maintaining, repairing or replacing the portion of the service line from the right-of-way to their premises, while Citizens is responsible for maintaining, repairing or replacing only the portion in the right-of-way.

Potential costs may be disproportionately borne by specific low-income localities, such as Detroit, which has an estimated 100,000 LSLs and where 40 percent of the population is below the poverty line. . . . LSLs are often partially or totally owned by private homeowners. . . . To the extent water systems rely on homeowners to pay for replacement of privately owned portions of lines, there are concerns about consumer's ability to pay and the possibility that lower-income homeowners will be unable to replace lines, resulting in disparate levels of protection.

Revisions to the LCR were proposed in November 2019, which would require all utilities to develop LSLR programs. This Plan is designed to align with requirements of the proposed LCR revisions and will be adapted as necessary to ensure compliance with final LCR revisions once published.²

In response to growing awareness about the need for LSLR programs, the Indiana General Assembly enacted legislation in 2017, which was amended in 2020, to allow municipally owned utilities to include the costs for customer lead service line improvements in rates under Indiana Code § 8-1-31.6. Both a public water utility and a municipally owned water utility must obtain Indiana Utility Regulatory Commission (“IURC”) approval of the LSLR plan. If the plan is approved, the water utility may undertake LSLRs at no direct cost to the customer or property owner and take a proactive approach to eliminate service line lead exposure risk for all customers.

² After receiving extensive public comment on a draft LCR, and consistent with the increased emphasis on reducing potential exposures to lead in drinking water, the U.S. EPA published a final version of the LCR revisions on January 15, 2021. However, after changes in the Administration, the U.S. EPA subsequently announced two extensions to the rule implementation date to allow additional time for public input into the rule and consideration of potential modifications.

Section II

Where We Are Now: Lead Service Lines

The Citizens distribution system has approximately 370,000 active and inactive service line connections. The majority of these service lines were added to the system after lead piping was banned in 1948, and therefore, have no potential to contain lead. Prior to 1948, service lines were made of lead, iron, and copper, or some combination of these materials. Analysis of utility service line records indicates the presence of approximately 75,000 service lines in Center Township and surrounding areas with the potential to contain at least some portion of lead pipe, and which therefore, can be classified as a potential lead service line. Based on the same analysis, Citizens expects approximately 55,000 of these 75,000 service lines will be found to actually contain lead pipe and require a LSLR or termination.

One of the challenges facing many water utilities, including Citizens, is incomplete or inaccurate service line location information, especially for the segments on private property. The entirety of the service line is owned by the customer, as opposed to the utility. Therefore, the utility's historical records often lack material details regarding service lines. In addition, service lines that have been in service for decades may have had repairs or replacements of lead service lines, resulting in hybrid material service lines with partial lead pipe remaining. As additional information on service line materials is gained through implementation of this Plan, it is expected that the accuracy of the total estimated number of lead service lines will be improved, and the estimate of 55,000 may increase or decrease.

Section III

Citizens' LSLR Plan

This Plan outlines Citizens' process for replacing customer owned lead water service lines in accordance with Ind. Code §§ 8-1-31.6-5(a) and 8-1-31.6-6. This Plan integrates the replacement of such service lines into Citizens' existing utility line maintenance and replacement processes and establishes other means to achieve the goal of full LSLR for affected property owners.

A. Primary Components of the LSLR Plan

The primary components of the Plan include: (1) Capital Improvement Projects and Emergency Repair LSLRs; (2) Pro-Active LSLRs; (3) Property Owner-Initiated LSLRs; and (4) Abandoned/Inactive Service Line Termination.

1. Capital Improvement Projects and Emergency Repair LSLRs

The first component of the Plan is to replace customer owned lead service lines in concert with scheduled water main replacement and relocation projects performed during the course of Citizens' planned maintenance and replacements of utility owned facilities. Historically, work has been limited to the portion of the service line in the public right-of-way, but it sometimes included service line replacements associated with capital improvement projects (such as main replacements or relocations), service line replacements associated with emergency repairs (i.e., main breaks or service leaks in the right-of-way), curb stop repairs, and water meter relocations. Citizens will expand its current processes to include the replacement of customer

owned lead service lines. This would include replacement of any lead/galvanized iron components from the water main to the home with no incremental cost to the property owner. Replacements under this component will include work on lead service lines disrupted by projects undertaken by other agencies.

In all cases, LSLRs will include the entire service line (the portion located in the right-of-way and the portion located on private property), assuming the property owner agrees to replacement of the line on their property. If a property owner refuses to allow Citizens to replace the portion of the service line on their property, the refusal will be documented, and Citizens will replace the portion of the service line in the right-of-way and connect the new service to the existing customer owned service line at the property line.

Citizens regularly conducts emergency repairs as part of its normal operations. Under the Plan, when completing emergency repairs, Citizens may conduct unscheduled service line replacements for service lines that have lead material, or a complete replacement may be rescheduled for a later time with the property owner. The goal of this component of the Plan is to achieve a full service line replacement on all lead service lines that are encountered as a part of Citizens' ongoing operation and maintenance work activities.

Service line replacements on private property require a Right of Entry Agreement signed by the property owner. All new service lines will be flushed and sampled to maintain water quality in accordance with established practices and guidance for work on lead service lines. Citizens will provide information to the property owner about lead and drinking water, including health effects, exposure to lead, flushing recommendations, ways to minimize exposure to lead, testing for lead, frequently asked questions, and further contact information. Citizens will not be replacing plumbing and fixtures inside buildings on the property. Therefore, as part of this Plan, Citizens will provide customers with information that will enable them to minimize lead exposure from their own plumbing or fixtures.

2. Pro-Active LSLRs

Citizens will develop a pro-active LSLR process to prioritize replacement of non-leaking lead service lines or lead service lines connected to mains not at the end of their useful life and not scheduled for replacement. Given the significant number of potential lead service lines, the pro-active process will prioritize areas/neighborhoods based on factors that include utility asset data, water quality and health risks, neighborhood economic impacts, and coordination with other infrastructure work, such as road or public improvement projects. The schedule also may consider external factors, such as supporting documentation from the Indiana Department of Health that links an area to higher lead levels from other sources or the U.S. Department of Housing and Urban Development lead remediation programs. Project areas will be identified based on alignment of the highest priority areas with the anticipated funding levels.

Once a project area is identified and scheduled to commence, Citizens will communicate to each property owner and customer in the project scope, associated neighborhood groups, and local leaders. Initial communications will notify those groups of the upcoming project and provide a description of the various steps involved to obtain Right of Entry. Communications will continue throughout field surveys, construction, flushing, sampling, and testing.

Initial field work will involve verification of service line materials at each property by visual inspection of the service line using hydrovac excavation within the right-of-way and on the property. The results will be used to determine if a LSLR is required. Service line material information and next steps will be documented and provided to the property owner. Service lines containing lead/galvanized iron will be scheduled for replacement at no cost to the customer or property owner. Construction crews will schedule the LSLR within a neighborhood or area to maximize construction efficiency. Once installed, new service lines will be flushed, sampled, and tested to confirm water quality, and the test results will be provided to the property owner to complete the process.

3. Property Owner-Initiated LSLRs

Property owners not located in a current prioritized project area but who want to expedite replacement of their lead service line have two options. Under both options, Citizens will fund the portion of the replacement in the public right-of-way, but the property owner will be required to fund replacement of the portion of the service line on private property. The two options available include the following:

- A. Property owners may request a quote for the full-service line replacement directly from Citizens. Citizens or its contractor will assess the project and provide a quote to the property owner for the property owner's cost of the replacement on private property. Subject to the property owner's agreement to pay for the replacement of the portion of the service line on private property and execution of a Right of Entry Agreement, Citizens will replace the service line, including both the portion in the right of way and the portion on private property, as one project.
- B. Property owners may directly contract with a plumber/contractor registered and bonded with Citizens, complete a service line modification permit, and replace the portion of the service line on private property at the property owner's cost. Upon notification, Citizens will attempt to coordinate replacement of the portion of the service line in the right-of-way so that the right-of-way replacement is conducted simultaneously with the property owner's work. If this timing is not possible, Citizens will replace the right-of-way portion within 45 days, barring unusual circumstances.

Lead service lines modified by the property owner must be brought up to current standards, requiring full replacement of the lead service line. As with other LSLR projects, the new service line will be flushed, sampled, and tested, with the test results provided to the property owner.

4. Abandoned/Inactive Service Line Termination

Citizens will identify and schedule a disconnect or removal of lead service lines under either of the following circumstances: (1) if a property wrecking order is issued; or (2) if an abandoned property with no serviceable structure is identified as part of other utility work. New structures built at these addresses will be required to install new service lines as part of the construction project.

B. Outreach and Community Coordination

1. Comprehensive LSLR Plan Communication Plan

Citizens will take steps to ensure customers and property owners are kept informed of pending LSLRs. During construction, notices of construction activity and water service disruption will be provided to each customer or property owner. Post-construction flushing and sampling instructions with final test results will be sent to each property owner after their service line has been replaced. LSLR signage for neighborhoods used during LSLR projects will help address questions and communicate consistent messages to affected neighborhoods. Citizens also will include an enhanced LSLR portal on its website that includes frequently asked questions about the LSLR Plan, construction activities, and links to other agencies and resources that may answer questions.

2. Citizens' LSLR Right of Entry Agreement Form

In all cases, before performing LSLR work on private property, the property owner will be provided with Citizens' LSLR Right of Entry Agreement explaining that there is no direct cost to the customer or property owner and allowing right of entry for utility staff and contractors to perform the LSLR work required. The property owner can either agree to the LSLR by signing the Right of Entry Agreement or decline by acknowledging awareness of a service line containing lead.

C. Flushing, Sampling, and Testing Plan

After the LSLR is complete, the property owner will be provided with a lead information packet, flushing instructions, and sample bottles. Per the instructions, the property owner will flush their home plumbing, collect water samples, and contact Citizens for bottle pickup. The samples will be analyzed, and results will be provided to the property owner. Citizens expects sample results will typically be well below the Lead Action Level of 0.015 mg/L, or 15 parts per billion (ppb). However, if results are above the Lead Action Level, then the flushing, sampling, and testing process will be repeated. Citizens will work with the property owner and other outside agencies such as IDEM and the local health department to identify the sources of the lead in the event of continued elevated results.

Section IV

Citizens' LSLR Plan Anticipated Timeline and Cost

Year 1 begins once the Commission authorizes Citizens to include an adjustment in its rates and charges to pay for Plan costs. Start-up and development costs recovered during Year 1 will include costs for: (1) Communication/Marketing Material updates and refinements; (2) Service Line Management Software development, installation, and implementation; (3) Service Line Material Probability Analysis Process development; (4) Project Reporting, Tracking development and implementation; (5) Laboratory Testing implementation; (6) Interdepartmental Support (IT, Regulatory, Operations, Customer Service) process development and implementation; and (7) field investigations to enhance data integrity and identify unknown service materials for Plan prioritization and scheduling. Citizens estimates 220 total service lines will be

addressed in Year 1, including 120 replacements and 100 service lines that are field-confirmed as non-lead and not requiring replacement. Fewer pro-active LSLRs are scheduled for Year 1 to allow these field investigations to be prioritized for completion to minimize field logistic impacts in Years 2-5. The projected cost of Year 1 is \$2.5M.

Replacements accelerate in Years 2 through 5 to a sustainable level. Valuable information will be learned during the first five years of the Plan that may result in modifications to the Plan based on identifying process efficiencies to increase the number of service lines addressed per year. During Year 2, 660 service lines will be addressed, including 560 replacements that will include 400 pro-active LSLRs. Corresponding funding levels increase to \$5M annually in support of these replacements.

The Plan will be modified to incorporate these efficiencies or other appropriate adjustments on an ongoing basis. However, an increased level of funding will be needed beyond Year 5 to eliminate all lead service lines in slightly over 30 years. Future year expense projections will be updated based on the lessons learned during the first few years of the Plan. Final decisions about projected future year funding levels will be made in these years based on balancing progress with affordability. The total projected Plan cost is \$526M in 2020 dollars.

The Plan requires a full-time Manager and part-time Engineering, Communications, and Database Support Staff. Outside services for Specialized Consulting Support and Service Line Management Software range from \$190,000 during Years 1 through 5 and increase as the Plan expands to \$270,000 annually in later years.

Table 1 provides a summary of the Plan, including the number of service lines verified and replaced each year as well as the anticipated annual funding levels.

Year	Initial Phase		Future Phases			
	1	2 thru 5	6 thru 10	11 thru 15	16 thru 25	26 thru 33
Service Lines Verified per year	220	660	1,390	2,700	2,850	2,800
Service Lines Replaced/Removed per year	120	560	1,140	2,100	2,050	2,000
Cumulative Number of Service Lines Verified	220	2,860	9,810	23,310	51,810	74,210
Cumulative Replacements/Removals	120	2,360	8,060	18,560	39,060	55,060
Plan Development (\$000's)	\$ 900	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50
Plan Delivery (\$000's)	\$ 831	\$ 831	\$ 1,061	\$ 1,234	\$ 1,234	\$ 1,234
Field Construction (\$000's)	\$ 797	\$ 4,180	\$ 8,976	\$ 17,068	\$ 16,894	\$ 16,632
Total Annual Plan Cost (\$000's)	\$ 2,528	\$ 5,061	\$ 10,087	\$ 18,352	\$ 18,178	\$ 17,916
Total Cumulative Plan Cost (\$000's)	\$ 2,528	\$ 22,773	\$ 73,211	\$ 164,973	\$ 346,755	\$ 525,915

Section V

Citizens' Plan: Statutory Requirements under Indiana Code § 8-1-31.6-6

Ind. Code § 8-1-31.6-6 requires ten specific criteria be addressed in a water utility's plan for customer lead service line improvements. Citizens' Plan addresses each of these ten criteria as follows:

A. Availability of Grants or Low-Interest Loans

IC 8-1-31.6-6(a)(1): The availability of grants or low interest loans and how the water utility plans to use available grants or low interest loans to help the water utility finance or reduce the cost of the customer lead service line improvements for the water utility and the water utility's customers, including any arrangements for the customer to receive available grants or financing directly.

Citizens will monitor the availability of grants and low interest loans that may offset the cost of LSLRs and the Plan. Additional funding through grants or low interest loans would help reduce the Plan cost and potentially increase the number of annual replacements.

Citizens will continue to discuss LSLR funding options with federal, state, and local agencies. The Indiana Finance Authority ("IFA") is responsible for the receipt and distribution of low interest and/or grant funds

for the State of Indiana. IFA oversees the State's debt issuance in support of state, local, and business investments, including the State Revolving Fund ("SRF") and the State Water Infrastructure Fund ("SWIF"). SRF funds are eligible to support drinking water infrastructure improvements at low interest rates to promote public health and the environment. SWIF funds provide grant funding to Indiana utilities for wastewater, drinking water and stormwater projects that either protect or improve public health or water quality. IFA is also pursuing funds from sources like the Water Infrastructure Finance and Innovation Act, a federal U.S. EPA program designed to provide low-cost assistance to accelerate investments in water and wastewater infrastructure. Citizens will continue discussions with the U.S. EPA, IFA, and others to identify these types of funds and their eligibility to support the Plan.

B. Replacement Plan for Customer Owned Lead Service Lines

IC 8-1-31.6-6(a)(2): A description of how the replacement of customer owned lead service lines will be accomplished in conjunction with distribution system infrastructure replacement projects.

As discussed in detail above and incorporated herein by reference, Citizens' Plan includes four categories of LSLRs:

- A. Capital Improvement Projects and Emergency Repair LSLRs;
- B. Pro-Active LSLRs;
- C. Property owner-Initiated LSLRs; and
- D. Abandoned/Inactive Service Line Termination.

C. Estimated Service Line Replacement Savings using Citizens' Replacement Plan Compared to Individual Customer Replacement

IC 8-1-31.6-6(a)(3): The estimated savings in costs per service line that would be realized by the water utility replacing the customer owned portion of the lead service lines versus the anticipated replacement costs if customers were required to replace the customer owned portion of the lead service lines.

Citizens anticipates the approximate cost of replacing a service line will be \$7,475, dependent on the particular circumstances. Citizens anticipates this represents a savings of up to 25% as a result of Citizens managing the work compared with the property owner managing the work. This estimated savings is based on estimates provided by Citizens' maintenance crews and discussions with contractors having extensive experience in service line replacement work. By having Citizens manage LSLRs, property owners will have the benefit of consistent replacement methods, expedited project completion, and less disruption to other customers and the surrounding community.

Citizens' cost estimates are based on planned and actual costs from previous projects where LSLRs were necessary. This estimate includes: (i) planning and scheduling efforts for the water service line replacement; (ii) installing a new water service line and retiring the service line; (iii) coordinating the flushing and sampling of the water after construction; (iv) restoring the construction site; and (v) general coordination and administration. The cost estimates, based on 2020 dollar amounts, include \$4,200 for right-of-way LSLR,

\$3,200 for the LSLR on private property, and \$75 for coordinating the post-construction water flushing and sampling.

Citizens will monitor these costs and anticipates the average costs could increase or decrease as the LSLR Plan continues. Future factors that could influence costs include: (i) local codes and ordinances; (ii) new or changed laws or construction standards; (iii) competitive market prices; (iv) construction technology improvements; and (v) property site conditions. Citizens will continue to refine costs as the Plan is implemented and monitored and use changes in costs to increase or decrease the number of annual LSLRs.

D. Estimated Number of Citizens' Lead Mains and Service

IC 8-1-31.6-6(a)(4): *The number of lead mains and lead service lines estimated to be part of the water utility's system.*

Citizens has no lead mains in its distribution system, so there are no lead main replacements scheduled in the Plan. Citizens has reviewed its historical lead service line records and estimates that there are approximately 55,000 service lines with some portion of the pipeline containing lead, but the number could be as high as 75,000.

E. Estimate of Annual Customer Owned LSLRs

IC 8-1-31.6-6(a)(5): *A range for the number of customer owned lead service lines estimated to be replaced annually.*

Citizens anticipates investing approximately \$2 to \$5 million annually in the first five years of the Plan (refer to Table 1), resulting in an estimated 250 to 650 annual full-service line replacements, including replacement of lead in both the right-of-way and on private property. Increased field verification of the service line materials, construction technology improvements, and other factors could increase the number of annual replacements accomplished at similar investment levels in future years. Citizens intends to annually assess replacements performed, apply "lessons learned" to the Plan, and re-evaluate the number and type of LSLRs remaining to adjust the resource and replacement forecast.

F. Estimate of Annual Lead Main Replacements

IC 8-1-31.6-6(a)(6): *A range for the total feet of lead mains estimated to be replaced annually.*

Citizens has no lead mains in its distribution system.

G. Proposal for Unusual Site Restoration Costs

IC 8-1-31.6-6(a)(7): *The water utility's proposal for addressing the costs of unusual site restoration work necessitated by structures or improvements located above the customer owned portion of the lead service lines.*

Unusual restorations will be assessed by Citizens' staff before construction work begins. Unusual restoration activities include any restoration beyond the scope of normal restoration work defined as follows:

- (1) Activities include backfilling, compaction, re-seeding in lawn areas and minor concrete and asphalt repairs on sidewalks and driveways.
- (2) The work can be accomplished with the same equipment and crew as was used to complete the LSLR.
- (3) The site allows access to construction equipment to perform restoration using traditional methods and does not require removal and/or replacement of unusual original site elements like fences, walls, patios, drives, etc.

If unusual site restoration work is expected, Citizens will provide an estimate of the additional cost to complete this work to the property owner. If the estimated cost of the unusual restoration work is equal to or less than \$500, Citizens will complete the restoration work at no cost to the customer. If the cost of the unusual restoration work exceeds \$500, the property owner will have the option to determine whether they want Citizens to complete the work in whole or in part, or not at all. If the customer chooses to have Citizens complete the unusual restoration work in whole, Citizens will pay for restoration cost up to a cap of \$500 and invoice the customer for any restoration costs above that amount. The property owner alternatively can choose to have Citizens complete the work in part, up to the \$500 cap and the property owner can independently complete the remainder of the restoration work.

Citizens anticipates unusual LSLR restorations will be rare. In 2018, Indiana American Water Company reported in IURC testimony that only one out of 81 LSLR resulted in an unusual site restoration,³ or 1.2%, which would mean that Citizens would anticipate that 600-700 LSLRs might result in unusual site restorations during the implementation of the Plan.

H. Plan's Communication and Documentation Proposal

IC 8-1-31.6-6(a)(8): The water utility's proposal for: (A) communicating with the customer the availability of the water utility's plan to replace the customer owned portion of the lead service line in conjunction with the water utility's replacement of the utility owned portion of the lead service line; and (B) documenting the customer's consent or lack of consent to replace the customer owned portion of the lead service line.

1. Citizens' LSLR Plan Communication Documents

Communications regarding lead and drinking water will include general information on Citizens' website (CitizensEnergyGroup.com) under the section "Lead and Copper in Drinking Water." This site will provide customers with immediate access to up-to-date information on lead and frequently-asked-questions about lead and service lines.

As water service lines are identified for replacement, Citizens staff and its contractors will contact affected property owners to coordinate replacement and avoid inconvenient service interruptions. After service is

³ IURC Cause No. 45043, Exhibit No. 1 - Direct Testimony of Gary M. Verdouw on Customer Lead Service Line Replacement Program.

restored through the new service line, a water flushing and sampling packet containing whole-house flushing instructions, water sampling instructions, sampling bottles, water sampling questionnaire, and additional information about lead and drinking water will be provided to the property owner. Citizens' staff will coordinate with the property owner to pick up the water samples for laboratory testing and results will be provided verbally and in writing to the property owner. If additional sampling is required, Citizens staff will provide a new water flushing and sampling packet and arrange a new pick up time for the additional water sample bottles.

2. Citizens' LSLR Right of Entry Agreement

Citizens' Right of Entry Agreement form will be provided to each property owner prior to work on private property. This agreement provides the legal framework for the completion of the LSLR by Citizens at no cost to the property owner and allows the right of entry for Citizens staff and contractors to perform the LSLR work required. A property owner can agree to permit Citizens to replace their lead service line by signing the agreement or decline to permit Citizens to replace the service line by acknowledging awareness of a service line containing lead material. Citizens will retain all Right of Entry Agreements.

I. Future Ownership of the New Service Line

IC 8-1-31.6-6(a)(9): The water utility's proposal concerning whether the water utility or the customer will be responsible for future replacement or repair of the portion of the new service line corresponding to the previous customer owned lead service line.

The Plan does not change the ownership of the current or future service lines. Ownership of the service lines will continue to remain with the customer and/or property owner.

J. Estimated Plan Total Cost and Annual Cost Range

IC 8-1-31.6-6(a)(10): The estimated total cost to replace all customer owned portions of the lead service lines within or connected to the water utility's system and an estimated range for the annual cost to be incurred by the water utility under the water utility's plan.

Table 1 includes the estimated total cost to replace all customer owned lead service lines within or connected to the water utility's system and an estimated range for the annual cost to be incurred under the Plan.