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STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF INDIANA-AMERICAN)
WATER COMPANY, INC. ("INDIANA)
AMERICAN") FOR (1) APPROVAL OF ITS) CAUSE NO. 45043
LEAD SERVICE LINE PLAN PURSUANT TO)
IND. CODE CHAP. 8-1-31.6 AND (2))
APPROVAL OF ASSOCIATED CHANGES) APPROVED: JUL 25 2018
TO INDIANA AMERICAN'S RULES AND)
REGULATIONS FOR WATER SERVICE.)

ORDER OF THE COMMISSION

Presiding Officers:

Sarah E. Freeman, Commissioner

David E. Veleta, Senior Administrative Law Judge

On January 29, 2018, Indiana American Water Company, Inc. ("Indiana American") filed its Petition and case-in-chief requesting the Commission for certain approvals of its lead service line plan. On February 12, 2018, Citizen Action Coalition of Indiana ("CAC") filed its Petition to Intervene, which was granted by docket entry issued February 23, 2018. On February 26, 2018, Schererville Municipal Water Works ("Schererville") filed its Petition to Intervene, which was granted on the record at the prehearing conference and preliminary hearing.

On April 13, 2018, the Office of Utility Consumer Counselor ("OUCC"), filed its case-in-chief. On April 23, 2018, Indiana American filed its Rebuttal Testimony and Attachments in this Cause.

An evidentiary hearing in this Cause was held commencing at 9:00 a.m. on May 7, 2018 in Room 222, PNC Center, 101 W. Washington Street, Indianapolis, Indiana. Indiana American, the CAC, Schererville, and the OUCC appeared and participated in the hearing.

Based upon the applicable law and evidence, the Commission now finds:

1. Notice and Jurisdiction. Notice of the public hearing conducted herein was given by the Commission as required by law. Indiana American is a "public utility" within the meaning of that term in Indiana Code § 8-1-2-1. Under Indiana Code Chapter 8-1-31.6, the Commission has authority to approve a water utility's plan for the replacement of the customer owned portion of lead service lines within or connected to the water utility's system. Therefore, the Commission has jurisdiction over Indiana American and the subject matter of this proceeding.

2. Indiana American's Characteristics. Indiana American is an Indiana corporation engaged in the provision of water utility service to the public in and around numerous communities throughout the State of Indiana for residential, commercial, industrial, public authority, sale for

resale and public and private fire protection purposes. Indiana American also provides sewer utility service in Wabash and Delaware Counties.

3. Relief Requested. Petitioner requests that the Commission approve its Customer Lead Service Line Replacement Plan and an Addendum to Section 4 of its Rules and Regulations.

4. Indiana American's Direct Evidence. Indiana American presented the direct testimony of Stacy S. Hoffman, Director of Engineering for Indiana American.

A. Indiana Code § 8-1-31.6-6(a). Mr. Hoffman testified in support of Indiana American's Lead Service Line Replacement Plan ("Plan"). He testified that the Plan is being submitted under House Enrolled Act No. 1519 ("HEA 1519"). Mr. Hoffman explained Indiana HEA 1519 was signed into law by Governor Eric Holcomb on April 20, 2017, and became effective as of July 1, 2017. He further testified that HEA 1519 contains, among other items, the addition of a new chapter to the Indiana Code, Chapter 8-1-31.6 which establishes a process for water utilities to obtain the authority to replace customer owned lead service lines and recover a return of and on the investments made to replace these lines, even though the lines are not owned by the utility.

Mr. Hoffman testified that Indiana Code § 8-1-31.6-5(a) provides that:

[b]efore a water utility may seek to include customer lead service line improvements as eligible infrastructure improvements for purposes of Indiana Code Chapter 8-1-31, the water utility must first obtain approval from the commission of the water utility's plan for the customer lead service line improvements. To seek approval of the water utility's plan for the customer lead service line improvements, the water utility shall file with the Commission a petition and case-in-chief, including the information set forth in section 6 [IC 8-1-31.6-6] of this chapter.

He further testified that Indiana Code Chapter 8-1-31.6 includes ten specific items that must be addressed in a water utility's plan for customer lead service line improvements. Mr. Hoffman also testified that the Plan addresses each of the ten items included in Indiana Code § 8-1-31.6-6 in its own separate section.

B. Customer Lead Service Line Replacement Plan. Mr. Hoffman testified that Attachment GMV-1 is the Customer Lead Service Line Replacement Plan prepared by Indiana American under HEA 1519. He testified that the Plan is designed to be the document that is followed when replacing customer owned lead service lines under HEA 1519. Mr. Hoffman further testified that Indiana American personnel met with Commission Staff, OUCC staff, and the Indiana Utility Consumer Counselor to explain the Plan and receive their feedback in an effort to ensure the Plan is responsive to the questions they had. He also testified that Indiana American met with James McGoff, the Indiana Finance Authority ("IFA") Director of Environmental Programs, in developing the Plan relative to availability of grants and/or low interest rate loans. Various contractors were also consulted.

Mr. Hoffman testified that a review of Indiana American's available historic service records indicates that 50,748 lead service lines from the distribution main to the property line may have been present at one time at the addresses identified. He explained that it is anticipated that the number of lead service lines originally identified from these records will be reduced because a number of these premises may no longer have service or may have been redeveloped with a new address and a new non-lead service line. Moreover, he testified that Indiana American could also discover an additional number of lead services through field investigations of both Indiana American-owned and customer-owned portions of the service lines.

Mr. Hoffman also testified regarding Indiana American's time range to complete the customer owned lead service line replacement. He explained that for purposes of this Plan, Indiana American is providing a range of time for completion of replacement of all customer owned lead service lines of anywhere from 10 years to 24 years. The total estimated cost to replace an estimated 50,748 customer owned lead services at an average cost of \$3,500 per service in 2017 dollars is \$177,618,000. The range of replacement annually would be 1,000 to 6,000 service lines per year, with an annual cost range of \$5,250,000 to \$17,500,000, again in 2017 dollars. Mr. Hoffman testified that Indiana American has provided such a wide range of time because there are a number of conditions that could affect the timeframe for completion of customer owned lead line replacement. He explained completion will be most affected by the availability of contractors to complete the lead service line replacement. Additionally, the timeframe will be affected by the availability of lower interest rates or no interest financing; the availability of additional capital investment funds from other sources; changes in the main replacement scheduling; the opportunity to take advantage of contractors already mobilized to complete additional lead service line replacements in the area; and the impact on customers, including service cost and local street impacts and closing, among other things. He testified that Indiana American intends to replace lead service lines as quickly as is practical and as efficiently as possible, but the actual time frame could vary due to a variety of reasons, several of which are outside of Indiana American's control.

C. Addendum to Section 4 of Indiana American's Rules and Regulations.

Mr. Hoffman testified that Indiana American is proposing an Addendum to Section 4 of its Rules and Regulations to create a new Section 4.4 (included as Attachment GMV-2) as part of its Plan to address premise locations that have been disconnected and inactive for a period of 24 consecutive months or that have been physically disconnected from Indiana American's mains. He explained that Indiana American is seeking this change because it has a number of premises where lead service lines are believed to exist but that have not been connected for service for 24 months or more—essentially no customers exist for these services. Section 4.4 states that any premise (account) with a lead service line that is or becomes inactive for a period of 24 consecutive months or that has been physically disconnected from Indiana American's mains will not be eligible for service reconnection unless and until the customer replaces the customer portion of the lead service line. He further testified that Indiana American would install a new non-lead service line to the property and require the property owner to install the customer owned portion of the service line that meets current building code and Indiana American standards before new water service is connected. The customer would also be subject to a connection fee per Indiana American's approved tariffs. Mr. Hoffman testified that Indiana American does not feel that disconnected accounts should be included in the customer replacement, but if there is interest in connecting an account that has been inactive or vacant for a period of more than 24 months, Indiana

American looks to ensure that the lines providing water to that service meet today's standards and thus do not utilize any existing lead service lines. He further testified if the Addendum to Section 4.4 of Indiana American's Rules and Regulations were not approved at this time, a customer request to reconnect a service that has not been connected for service for 24 months or more would be granted by connecting the new non-lead Indiana American portion of the service line to the existing customer lead service line.

5. OUCC's Evidence. Cynthia M. Armstrong testified on behalf of the OUCC. She testified that Indiana American's Plan addresses the ten criteria included in Ind. Code § 8-1-31.6-6(a). However, the OUCC has concerns regarding both the lack of detail and supporting materials for information presented within the Plan and with Indiana American's proposed execution of certain components of the Plan. Ms. Armstrong testified that the OUCC does not want to prevent Indiana American from beginning its replacement of both company- and customer-owned lead service lines. Ms. Armstrong expressed the following concerns with Indiana American's Plan: (1) Indiana American's description of low interest loans or grants to fund the program; (2) how Indiana American plans to accomplish the replacement of customer owned lead service lines; (3) lack of measures to determine the efficacy of the program; (4) its communication plan to customers with lead service lines; (5) the estimated length and cost of the program; and (6) Indiana American's request to change the eligibility of service requirements for properties that have been inactive for 24 or more consecutive months.

Ms. Armstrong testified regarding the OUCC's concerns with Indiana American's description of low interest loans or grants to fund the program. She explained that the concern involves more the lack of detail describing other potential funding sources that could lower program costs. She testified that this could be rectified through an annual reporting process, where Indiana American provides a status update on its application for the low or zero interest loans or any grants the IFA is making available for lead service line replacement programs. Ms. Armstrong also testified regarding her concerns with how Indiana American plans to replace customer-owned service lines. She explained the main concern with the proposed Plan is that it does not appear to be based on the areas that may currently be the most at risk for higher lead levels. She testified that the replacement order of lead service lines proposed in the Plan is largely driven by Indiana American's existing prioritization model. She recommended that Indiana American be required to incorporate measured lead water levels, as well as the concentration of lead service lines within an area, into its prioritization model for infrastructure improvements. Additionally, she recommended that Indiana American's methods and progress toward incorporating these factors into its prioritization model be reported as part of the Annual Report she recommended for Indiana American's lead service line replacement program. Ms. Armstrong also testified regarding her concerns with the lack of measures to determine the efficacy of the projects. She recommended that Indiana American be required to conduct testing both before and after replacement on a certain percentage of residences participating in the lead service line replacement program. Ms. Armstrong further recommended that the results of such tests should be provided in the recommended Annual Report.

Ms. Armstrong also testified regarding her concerns with Indiana American's plan for communicating its lead service line replacement program and replacement efforts with customers through written materials. She testified that the information provided should be simple and easy to

understand for all customers. She also testified that Indiana American should be focusing on the face-to-face element of communicating its lead service line replacement efforts with customers and other important state agencies or organizations, like the Indiana State Department Health. Ms. Armstrong explained that customers must be able to speak with Indiana American personnel or contractors who are qualified and knowledgeable enough on project specifics to provide answers to questions that may not easily be answered by the written materials. She also testified that she is concerned about the indemnification language in the agreement and recommended that it be removed from the Water Service Line Replacement agreement. Ms. Armstrong also expressed concerns with both the estimated program cost provided by Indiana American and the program length. She recommended that a reauthorization date of five years be placed on the Plan. Finally, she testified that she does not agree with Indiana American's proposal for Addendum 4.4 of its Rules and Regulations. She explained that the Addendum is not necessary for Indiana American to implement its program. She testified that the 24-month time frame for account inactivity seems arbitrary and could exacerbate urban blight in neighborhoods where there are multiple homes in foreclosure. Ms. Armstrong further testified that if a property re-activates its account, Indiana American can provide the customer with the appropriate educational materials and obtain the customer's signature of acknowledgement that Indiana American has informed the customer of the presence of the lead service line. She recommended that the Addendum 4.4 be denied.

6. Indiana American's Rebuttal Testimony.

A. Information to be Supplied and 5-Year Sunset. Mr. Hoffman provided rebuttal testimony on behalf of Indiana American. Mr. Hoffman testified that Indiana American is agreeable to providing various categories of information about Plan implementation that Ms. Armstrong outlines. He testified that she is correct that there are potentially other sources of funding that may become available. Mr. Hoffman explained that in Indiana American's Plan, Indiana American only covered those funding sources that are currently available, but it is agreeable to including status reports on financing options. He further testified that this information is probably most effectively communicated either in work papers or as additional attachments that Indiana American would submit in future DSIC cases. Mr. Hoffman testified that Ms. Armstrong's request that Indiana American follow up with the OUCC 60 days after submitting information is unnecessary because if Indiana American provides the information in the context of DSIC cases, Indiana American will already be in communication with the OUCC and there should be no need for an additional step in the process. Mr. Hoffman testified in response to Ms. Armstrong's request that the program approval sunset after five years. He explained that to make the Plan automatically sunset, and require all of the parties to reconvene for another approval case when no one has identified a need to reopen the Plan, strikes him as unnecessary.

B. Additional Testing. Mr. Hoffman testified regarding Ms. Armstrong's request for additional lead testing. He explained Indiana American already collects a first sample immediately after replacing the service line and flushing the service line and the household or facility plumbing system. He further testified that Indiana American also offers customers an opportunity to collect a second sample within 72 hours after the first sample. Mr. Hoffman explained that many customers have been accepting the second sample opportunity thus far, though some customers either do not accept it or do not follow through with the offer. He also testified that Indiana American continues system sampling and testing at various tier 1 sites defined

by the Indiana Department of Environmental Management (“IDEM”) as part of the Lead and Copper Rule. He testified that Ms. Armstrong does not describe the specific purposes for the additional testing, i.e. what value it would add to the process, or how it might provide benefit to customers. Mr. Hoffman explained that testing for lead at sites defined by IDEM is already completed and reported by federal regulation known as the Lead and Copper Rule. He testified that Indiana American’s use of corrosion inhibitors in treatment protects the customer prior to lead service line replacement and testing after the replacement confirms water quality.

Mr. Hoffman testified that such additional testing would provide little or no additional value in terms of carrying out the purpose of Indiana American’s Plan. He testified that if the intended purpose for the additional testing is to collect data that could be utilized by other utilities or in other contexts, in his view it is not appropriate for Indiana American to conduct such testing at the expense of its customers. Mr. Hoffman also testified that what he believes Ms. Armstrong seeks is better obtained through a scientifically based survey, which would be handled through the commissioning of a study designed and funded either by the State, the U.S. Environmental Protection Agency or a non-governmental organization. He testified that expanded testing not designed for such research purposes, and conducted by one utility, is not going to provide data that will be useful or reliable because it will not be appropriately designed and it is not likely to be statistically significant. Additionally, he explained that such an undertaking would involve significant extra costs for funding research design, additional coordination, travel, sampling and testing activities, and study activities, which would be reflected in the rates of customers. He recommended that the expanded additional testing Ms. Armstrong desires, and the costs associated therewith, not be added to the cost of replacing customer-owned lead service lines. Rather, he recommended that those desiring the additional data should commission and fund a study.

During rebuttal, Mr. Hoffman shared information about Water Research Foundation (“WRF”) Study #4713, now commencing, in which Indiana American is planning to participate along with approximately 20 other water utilities in the United States and Canada. The study focuses on whole house flushing protocols in conjunction with full lead service line replacements. The study is designed by two engineering firms and builds off of prior WRF studies. It will include pre-work sampling and testing, and post work sampling and testing. The WRF study will involve much greater coordination, and a larger data set as the study includes 21 water utilities in the United States and Canada. Further, it has been designed specifically to gather information for the purpose of developing best practices during and after lead service line replacements to reduce or eliminate potential lead exposure from drinking water. Mr. Hoffman testified that Indiana American plans to incorporate best practices that result from Study #4713 into its Plan, and to the extent the study results indicate a modification is needed, Indiana American would seek a modification of the Plan.

C. Incorporating Lead in the Prioritization Model and Communications.

Mr. Hoffman testified that he found acceptable Ms. Armstrong’s suggestion that Indiana American incorporate in the prioritization model those service areas that may be testing closer to the action level for the Lead and Copper Rule or that have greater concentrations of lead service lines. He testified that Indiana American will include in its reporting information how it has done so. He noted that when Indiana American does this, it may result in the lead service line replacement

being accomplished at the higher end of the range set forth in its Plan, given that it will be adding weight to how quickly they are replaced.

Mr. Hoffman also testified in response to Ms. Armstrong's suggestions designed to improve communication, explaining that Indiana American must avoid marketing the Plan. He testified that if Indiana American is overly aggressive in its communications, everyone will want their line replaced immediately. Mr. Hoffman explained that Indiana American needs to communicate in a manner that avoids creating panic or upsetting customers. He testified that customer communication is important, but it should not rise to the level of a marketing plan. Mr. Hoffman also noted that Indiana American can communicate with the State Department of Health as suggested by Ms. Armstrong, but that it has already communicated with the Governor's Office. He also explained that thus far customers have been very welcoming of the program, which he believed has been in part due to the effective communication. Mr. Hoffman testified that he thinks the communication and customer participation has been so good thus far due to a subject that Ms. Armstrong also highlighted — face-to-face communication. He explained that Indiana American trains its own employees and consultants in interacting with customers face-to-face in this program, and has been communicating face-to-face through these projects with customers who can be helped with that interaction. Mr. Hoffman also testified that Indiana American always trains its employees and consultants that if they cannot immediately answer or resolve a unique question with a customer, they bring a supervisor or project manager into the conversation to assist. He testified that this is standard protocol for any type of project or activity, not only with the lead service line replacement program.

D. Indemnification. Mr. Hoffman testified regarding Ms. Armstrong's proposal on the indemnification clause in the lead service line replacement agreement. He explained that Indiana American and its parent company, American Water, use indemnification language for restoration of private property after company construction projects (e.g. main replacement and main relocation) to mitigate unanticipated and unknown costs. Mr. Hoffman testified that with lead service line replacement program, Indiana American is offering to replace a customer's assets, with a one year warranty on material and workmanship and site restoration with clearly defined limits. He testified that Ms. Armstrong states a concern for shifting risk from X to Y, but it is only through the offering of this program that Indiana American would be part of the equation. Currently, the customer bears the entire cost of replacement and any warranty it may obtain, as well as all of the risk. He explained that Ms. Armstrong further presumed, without support, that the replacement estimates include liability for damage, but removing indemnification language from the agreement, as she recommended, would prevent reliable estimation of liability and instead invite costly dispute.

E. Proposed Rule 4.4 Addendum and Recovery through a Fixed Charge. Mr. Hoffman also testified in response to Ms. Armstrong's request that the proposed rule 4.4 Addendum be denied. He testified that this is really a policy call for the Commission to make. He explained that for the most part, the properties subject to the rule would be premises that are nearly uninhabitable, given that they have been vacant for more than 24 months. He further testified that they will likely be owned by landlords and that communications concerning the dangers of lead and the existence of lead lines may not always reach the tenant. Indiana American proposed the rule change in order to eliminate the lead service lines as quickly as possible in this State, but such

premises should not be eligible for service until that lead service line has been replaced. Additionally, given that they have not been customers for the past 24 months, Indiana American felt it was unfair for Indiana American to replace the lead service line pursuant to the Plan in the same fashion as it would the lead service line of any other customer. Mr. Hoffman testified that, if the Commission wishes for Indiana American to continue to treat these premises as eligible customers pursuant to Ms. Armstrong's suggestion, that is acceptable. Finally, Mr. Hoffman testified that Indiana American will recover the associated costs in general rate cases and intervening DSIC cases.

8. Commission Discussion and Findings on Customer Owned Lead Service Line Replacement Plan. For a plan to be eligible for our approval, it must address the following individual categories set forth in Indiana Code § 8-1-31.6-6(b):

(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.

(2) A description of how the replacement of customer owned lead service lines will be accomplished in conjunction with distribution system infrastructure replacement projects.

(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.

(4) The number of lead mains and lead service lines estimated to be part of the water utility's system.

(5) A range for the number of customer owned lead service lines estimated to be replaced annually.

(6) A range for the total feet of lead mains estimated to be replaced annually.

(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.

(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.

(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.

(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.

Indiana American's Plan includes a recitation of each of these elements and a description of how the Plan addresses the element in question. For ease of reference, a copy of Indiana American's Plan is attached as Attachment A. The parties do not dispute the completeness of the Plan and we find that Indiana American's Plan addresses the required categories. We now proceed to address the additional suggested improvements suggested by Ms. Armstrong as they relate to the public interest.

A. Additional Testing. We appreciate and we share Ms. Armstrong's desire for more information about lead and the results and effects from replacing lead service lines, but we also appreciate and share Mr. Hoffman's opinion that such testing, to be meaningful, must be scientifically designed and not limited to one particular water utility. More information and implementation of best practices is an important goal we should set, but we must assure that we are appropriately responding to information rather than simply and sporadically gathering data. We find that Indiana American should continue its participation in the WRF Study and that it should share the results of the study with the OUCC and with this Commission when final. Furthermore, while we appreciate that Indiana American is continually looking at ways to improve its best practices, it would not be reasonable for the Commission to endorse practices without knowing what they are. Thus, to the extent the study results indicate a modification is needed, Indiana American should seek a modification of the Plan.

B. Prioritization Model. Ms. Armstrong suggested that lead and lead levels somehow be incorporated into Indiana American's prioritization model for distribution system improvements. Mr. Hoffman indicated this was an acceptable change to the Plan and that Indiana American could provide further updates on how this incorporation will be accomplished. However, Mr. Hoffman also indicated that altering the model could substantially shift the replacement of distribution mains to areas with a lower need. The OUCC has not offered any evidence that suggests that lead service lines on private property should be considered a greater threat than failures of the mains. Indiana American's proposed Plan appropriately focuses on the potential for increased lead levels that are experienced in conjunction with main and lateral replacement programs. Thus, we find that this is where the focus of Indiana American's Plan should remain. Therefore, we decline to accept Ms. Armstrong's suggestion that lead and lead levels be incorporated into Indiana American's prioritization model for distribution system improvements.

C. Information Updates. In addition to the information concerning the WRF Study, we find that Indiana American should also keep the Commission and the OUCC informed about the availability of funding for its Plan and the status of applications for any such funding. Indiana American shall provide this information as an additional work paper or testimony in future DSIC cases as appropriate.

D. Length of Plan Approval. Ms. Armstrong has requested that our approval expire automatically after five years and that a new proceeding then be convened to re-approve the Plan. We find this to be unnecessary. As noted previously, it is a state policy directive that customer-owned lead service lines be replaced as quickly as reasonably possible. The Commission

and the OUCC will be continually updated on the progress of Plan implementation through the information updates Indiana American is required to file under Paragraph C above. If at any point the OUCC or this Commission believes there is a need to reconsider aspects of the Plan, there are statutory mechanisms in place to do that. *See.*, Indiana Code §§ 8-1-2-54, -58, -59, and -72. We find the public interest is adequately served by compliance with this Order and operation of existing law.

E. Indemnification. Ms. Armstrong objected to the inclusion of an indemnification provision in the standard contract that Indiana American will use when it replaces a customer owned lead service line. Because the specific provisions of the contract are not part of the Plan that we are being asked to approve, we therefore decline to make a determination whether the terms of a particular indemnification provision are appropriate or not.

F. Overall finding on Indiana American's Plan. We find Indiana American's Plan to be reasonable and in the public interest. Subject to the estimated total cost to replace all customer owned portions of the lead service lines within or connected to Indiana American's system and the estimated range for the annual cost as described in Indiana American's Plan, in general rate cases Indiana American shall for ratemaking purposes add to the value of its property for purposes of Indiana Code § 8-1-2-6 the actual costs incurred by it in replacing the customer owned portion of the lead service lines and in removing customer owned lead service lines from service in accordance with the Plan we have approved, notwithstanding the continued ownership of the service line by the customer.

For purposes of the revenue limitation calculation under Indiana Code § 8-1-31-13, infrastructure improvement costs associated with customer lead service line improvements shall not be counted as adjustment revenues in determining whether Indiana American's total adjustment revenues exceed ten percent of its base revenue level approved in its most recent general rate case.

Finally, Indiana American may include the actual costs it incurs in connection with completing customer lead service line improvements that: (1) have been placed in service; and (2) have not been included in Indiana American's rate base in its most recent general rate case as eligible infrastructure improvements for purposes of Indiana Code Chapter 8-1-31.

9. Commission Finding On Proposed Rule Addendum 4.4. Indiana American also seeks to modify its rules and regulations of service to include Addendum 4.4, which would deny service availability to certain inactive accounts that continue to have a lead service line. Under Indiana American's proposal, if such a property has a lead service line, Indiana American would not provide service unless and until the owner replaces the lead service line on the property.

Ms. Armstrong objected to this limitation of service availability, arguing that the 24-month time frame was arbitrary and could exacerbate urban blight. Ms. Armstrong indicated the prospective customer should be advised of the existence of the lead service line on their property.

We agree with Ms. Armstrong that the proposed rule Addendum 4.4 should be denied. In addition to the problems noted by Ms. Armstrong, the proposed rule addendum has no limitation

on its applicability. Accordingly, we deny Indiana American's request to modify its rules and regulations of service to include Addendum 4.4.

10. Confidentiality. Indiana American filed a Motion for Protection and Nondisclosure of Confidential and Proprietary Information on April 23, 2018, which was supported by the Affidavit of Stacy S. Hoffman showing the information to be submitted to the Commission was confidential due to the confidential, proprietary, competitively sensitive and trade secret nature of the information. The Presiding Officers issued a Docket Entry on May 2, 2018, finding such information to be preliminarily confidential, after which such information was submitted by the OUCC under seal. We find all the information is confidential pursuant to Ind. Code § 8-1-2-29 and Ind. Code Chapter 5-14-3, is exempt from public access and disclosure by Indiana law, and shall continue to be held confidential and protected from public access and disclosure by the Commission.

IT IS THEREFORE ORDERED BY THE INDIANA UTILITY REGULATORY COMMISSION that:

1. With the enhancements we have approved as described in Finding Paragraph No. 8, Indiana American's Plan for customer owned lead service line replacements attached as Attachment A is approved.
2. Indiana American's proposed Addendum 4.4 to its Rules and Regulations of Service in the form submitted as Attachment GMV-2 is denied.
3. This Order shall be effective upon and after the date of its approval.

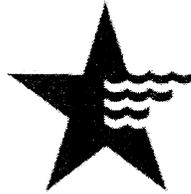
HUSTON, FREEMAN, KREVDA, OBER, AND ZIEGNER CONCUR:

APPROVED: JUL 25 2018

I hereby certify that the above is a true and correct copy of the Order as approved.



Mary M. Becerra
Secretary of the Commission



I N D I A N A
AMERICAN WATER

Customer Lead Service Line Replacement Plan
For Submission and Approval
To the Indiana Utility Regulatory Commission
As Required Under House Enrolled Act No. 1519
As Signed Into Law by Indiana Governor Eric Holcomb
On April 20, 2017

Submitted: January, 2018

Customer Lead Service Line Replacement Plan For Submission and Approval January, 2018



Introduction

Indiana American Water Company ("Indiana American", or "the Company") is submitting this plan for the replacement of customer-owned lead service lines pursuant to recent Indiana legislation ("Customer Lead Service Line Replacement Plan" or the "Plan").¹ The Plan includes replacement of customer-owned lead service lines in conjunction with main replacement and relocation projects using the Company's prioritization model previously reviewed in prior filings with the Indiana Utility Regulatory Commission ("IURC", or "Commission"). Leaking or damaged service lines will be replaced as soon as possible in line with traditional leak repair activity. Lead service lines on mains not at the end of their useful life and not scheduled for replacement will be replaced at the time most efficient for allocation of resources, minimization of mobilization costs, and with consideration of community disturbance. The Company plans to disconnect lead service lines that have not been active for a period of 24 consecutive months.

The Plan will allow Indiana American to accelerate the replacement of lead service lines that are still in use by focusing on those lines. State and/or federal funding for replacement programs are uncertain at this time, but will be utilized to accelerate replacement under the plan, as available.

Background

The United States Environmental Protection Agency's ("U.S. EPA") October, 2016 "Lead and Copper Rule Revisions White Paper" points out:

"It is important to recognize that LSLR ("lead service line replacement") presents substantial economic, legal, technical and environmental justice challenges. First, it is costly. Estimated costs for LSLRs range from \$2,500 to more than \$8,000 per line, suggesting an estimated cost of eliminating all 6.5 to 10 million LSLs nationwide ranging from 16 to 80 billion dollars. 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. Second, LSLs are often partially or totally owned by private homeowners. Under the current LCR ("Lead and Copper Rule"), public water systems are responsible for replacement of LSL or the portion of the LSL it owns. This is typically the portion of the line from the water main to the property line."

"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."

The Indiana General Assembly has therefore set State policy to facilitate Lead Service Line Replacement ("LSLR") in its 2017 session.

¹ On April 20, 2017, Indiana Governor Eric Holcomb signed House Enrolled Act No. 1519 into law, with the legislation made effective on July 1, 2017. House Enrolled Act No. 1519 contains, among other items, the addition of a new chapter to the Indiana Code – IC 8-1-31.6, which establishes a process for water utilities to obtain the authority to replace customer owned lead service lines and recover a return of and on the investments made to replace these lines, even though the lines are not owned by the utility.

**Customer Lead Service Line Replacement Plan
For Submission and Approval
January, 2018**



Statutory Consideration for Plan

IC 8-1-31.6-5(a) states:

“Before a water utility may seek to include customer lead service line improvements as eligible infrastructure improvements for purposes of IC 8-1-31, the water utility must first obtain approval from the commission of the water utility’s plan for the customer lead service line improvements. To seek approval of the water utility’s plan for the customer lead service line improvements, the water utility shall file with the commission a petition and case-in-chief, including the information set forth in section 6 of this chapter.”

IC 8-1-31.6-6 includes ten specific items that must be addressed in a water utility’s plan for customer lead service line improvements. Each of these ten items are listed below. The plan prepared by and for Indiana American addresses each of these specific items.

1. **Availability of grants or low interest loans.** *(See Page 4 of the Plan for details)*
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.
2. **How the replacement of customer owned lines will be accomplished.** *(See Page 5 of the Plan for details)*
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.
3. **Estimated savings for replacement of customer owned lead service lines by Indiana American as compared to the customer cost to replace an individual customer owned lead service line.** *(See Page 7 of the Plan for details)*
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.
4. **Estimated number of lead mains and lead service lines that are part of Indiana American’s utility system.** *(See Page 9 of the Plan for details)*
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.
5. **A range of the number of customer owned lead service lines estimated to be replaced annually.** *(See Page 10 of the Plan for details)*
IC 8-1-31.6-6(a)(5): A range of the number of customer owned lead service lines to be replaced annually.

6. **A range for the total feet of lead mains estimated to be replaced annually.** *(See Page 12 of the Plan for details)*
IC 8-1-31.6-6(a)(6): A range for the total feet of lead mains estimated to be replaced annually.

7. **Indiana American's proposal for addressing unusual site restoration costs.** *(See Page 13 of the Plan for details)*
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.

8. **Indiana American's communication and documentation proposal.** *(See Page 16 of the Plan for details)*
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.

9. **Indiana American's proposal for future ownership of the customer owned lead service line.** *(See Page 19 of the Plan for details)*
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.

10. **Estimated total cost and estimated annual cost range to replace customer owned lead service lines.** *(See Page 20 of the Plan for details)*
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.

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1. 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.

Indiana American will continuously monitor availability of grants and low interest loans for which it may be eligible and will take appropriate action to seek such funding that would reduce the total cost of lead service line replacement and accelerate implementation of the plan. The Company will invest its capital to execute the plan and schedule outlined herein; as grants or low interest loans become available, they will be used to accelerate the plan.

Pursuit of Low Interest Loans and/or Grants through the Indiana Finance Authority

The Indiana Finance Authority ("IFA") is the authority that is responsible for the receipt and distribution of low interest and/or grant funds for the State of Indiana. The mission of the IFA is to oversee State-related debt issuance and provide efficient and effective financing solutions to facilitate state, local government, and business investment in Indiana. Indiana American is eligible for available low interest loan funds, grant funds and State Revolving Fund ("SRF") Loan Program funds through the IFA.

The SRF Program provides low interest loans for projects that improve drinking water infrastructure. The program's mission is to provide eligible entities with the lowest interest rates possible on financing of such projects while protecting public health and the environment. The Company will pursue available SRF funding which would lower the total cost of implementing this LSLR plan and accelerate its execution. The Company will be proactive in discussing the priority of this work with the IFA, recognizing that this work will be ranked with other requests for funding and funding is limited.

The IFA is seeking authorization from the EPA to expand its funding sources and mechanisms, which could include funds pursuant to the Water Infrastructure Finance and Innovation Act of 2014, also known as "WIFIA". WIFIA is a federal credit program administered by the EPA for eligible water and wastewater infrastructure projects. Eligible borrowers include Drinking Water SRF programs. Should this funding become available to the IFA, and should its use lower the total cost of implementing the plan and accelerate its execution, then the Company will pursue such funding.

The IFA has also developed a loan offer for utilities and municipalities that increases the debt, but lowers the overall interest rate significantly below the SRF rate. This provides more funding while maintaining the required debt service level. Should this type of loan be available, lower the total cost of implementing the plan, and accelerate its execution, then the Company will pursue such funding.

The Company will pursue all of these options for which it may be or may become eligible, as well as any others that may become available and which will lower the total cost of implementing the plan and accelerate its execution.

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2. How the Replacement of Customer Owned Lead Service Lines will be accomplished

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.

Indiana American's Plan for LSLRs includes three LSLR categories:

1. LSLRs completed in conjunction with main replacement and relocation projects.
2. LSLRs completed for leaking or damaged service lines.
3. LSLRs completed on mains not at the end of their useful life and not scheduled for replacement.

The plan is to prioritize replacement in conjunction with main replacement and relocation projects using the Company's prioritization model previously reviewed in prior filings with the IURC. Leaking or damaged service lines will be replaced as soon as possible in line with traditional leak repair activity. Lead service lines on mains not at the end of their useful life and not scheduled for replacement will be replaced at the time most efficient for allocation of resources, minimization of mobilization costs, and with consideration of community disturbance. Indiana American Water will not be accomplishing customer lead service line replacements at an individual customer's request; rather, the replacements will be accomplished according to this Plan. The Company will consider special situations that might arise in the prioritization and scheduling of lead service line replacements; such as supporting documentation from the Indiana Department of Health that links a premise to higher lead levels from other sources, or a U.S. Department of Housing and Urban Development (HUD) lead remediation program.

In addition, Indiana American is proposing an Addendum to Section 4 of its Rules and Regulations² (new Section 4.4, a copy of which is included as Attachment GMV-2 to the Direct Testimony of Gary M. VerDouw in support of this Plan, which testimony is incorporated herein and made a part of this Plan) to address premise locations that have been disconnected and inactive for a period of twenty-four consecutive months or that have been physically disconnected from the Company's mains. The three LSLR approaches and the proposed Addendum to the Company's Rules and Regulations are explained further below.

LSLRs completed in conjunction with main replacement and relocation projects

Indiana American has created and implemented a Geographic Information System (GIS) based prioritization model for identifying pipeline replacement investment needs. The model prioritizes pipeline replacement needs through identification of service risks associated with pipe failure risks. Indiana American budgets and plans these pipe replacements on a continuing basis. Indiana American also budgets for and completes unscheduled main replacements because it knows from operating experience that pipes that are not initially planned for replacement will fail during the year and will require replacement of segments of those pipes to enable

² Indiana-American Water Company, Inc. Rules and Regulations Applicable to Water Service, I.U.R.C. W-15, Effective March 30, 2015.

continuing service to customers. Indiana American also relocates pipe when the pipes are affected by projects planned by governments and other entities.

LSLRs will include the Company owned portion of the service line, and the customer owned portion of the service line if the customer agrees to the replacement of their line on their property. If a customer refuses to have Indiana American replace the customer owned portion of the service line, the refusal will be documented as discussed in Section 8 (3) below. If a customer refuses the offer of replacing the lead service line on their property, Indiana American will proceed with replacing the Company owned portion of the service line and will connect the new service to the existing service at the customer property line. Indiana American will communicate with the customer about lead and drinking water with the same methods and materials as described in Section 8 of this Plan. The communications include information about lead and drinking water, health effects, exposures to lead, flushing recommendations, ways to minimize exposure to lead, testing for lead, frequently asked questions, and further contact information.

LSLRs completed for leaking or damaged service lines

Indiana American will complete LSLRs for leaking or damaged service lines. LSLRs will include the Company owned portion of the service line, and the customer owned portion of the service line if the customer agrees to the replacement of their line on their property. If a customer refuses to have Indiana American replace the customer owned portion of the service line, the refusal will be documented as discussed in Section 8 (3) below.

LSLRs completed on mains not at the end of their useful life and not scheduled for replacement

Some distribution system pipes are not at the end of their useful life and are not presently contemplated to be replaced within the Company nearer term view - at least within the next ten years, and likely longer depending on pipe condition. Indiana American is planning to complete LSLRs on these mains (without replacing the mains themselves), including the Company owned portion of the service line and the customer owned portion of the service line if the customer agrees to the replacement of their line on their property. If a customer refuses to have Indiana American replace the customer owned portion of the service line, the refusal will be documented as discussed in Section 8 (3) below.

Disconnection of lead services lines from distribution mains at properties that have not been a customer for 24 consecutive months or more

Indiana American has a number of premises where lead service lines exist that have not been connected for service for twenty-four months or more – in essence, no customer exists for these services. As part of this Plan, Indiana American is proposing that an Addendum creating a new Section 4.4 of the Company's Rules and Regulations be approved by the Commission. The proposed Addendum is attached as Attachment GMV-2 to the Direct Testimony of Gary M. VerDouw which is incorporated into this Plan for consideration and approval. The Addendum states that any premise (account) with a lead service line that is or becomes inactive for a period of twenty-four consecutive months or that has been physically disconnected from the Company's mains will not be eligible for service reconnection unless and until the customer replaces the customer portion of the lead service line. Indiana American would install a new non-lead service line to the property and require the property owner to install the customer owned portion of the service line that meets current building code and Indiana American standards before new water service is connected. The customer would also be subject to a connection fee per Indiana American's approved tariff.

If a customer requests to reconnect a service that has not been connected for service for twenty-four months or more, and Indiana American is not given such authority to amend its rules with the Addendum as requested above, the connection would be made and service started once the property owner is provided educational

materials and executes an acknowledgement of the knowledge of the lead service line. The acknowledgment would stipulate that the property owner disclose the lead service line information to any residents served by the service line, and to anyone who purchases the property from them.

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*3. Estimated Savings for Replacement of Customer Owned Lead Service Lines by
Indiana American Water as Compared to Customer Cost to Replace Individual
Customer Owned Lead Service Line*

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.

Estimated Savings from Indiana American Managed LSLRs compared with Home Owner Managed LSLRs

As explained below, savings of 25% to 30%, on average, are estimated to be realized from Indiana American managed LSLR work compared with home owner managed LSLR. In addition, scheduling and coordinating activities in a scenario of home owner managed work to ensure full service line replacements in conjunction with the Company's main replacement program would likely delay the Company's main replacement projects, increase the time to complete the projects, increase the time of disruption to customers and the community, and increase the cost.

Estimated Cost of Indiana American Managed LSLRs on Customer Properties

Indiana American commenced offering to replace customer owned lead service lines in 2017 when encountering lead service lines during main replacement and relocation projects. Work and costs for replacing the service lines includes:

1. Time and materials in communicating with customers for purposes of education, schedule coordination, and sharing water sample test results.
2. Installation of new water service line and retirement of old water service line.
3. Inspection of service line work.
4. Restoration work to normal site conditions.
5. Electrical inspection, removal of any electrical system grounding connection from the old water service line, and installation of new electrical grounding system when warranted.
6. Time and materials for flushing from the building outside hose bibb, and flushing of all operating faucets within the building.
7. Time and materials for collection of water samples, mailing samples, performing sample analyses, completing documentation, and sharing results with customers.
8. General coordination and administration.

At the time of preparing this filing, Indiana American had replaced 81 customer owned LSLs in 2017 as part of main replacement and relocation projects. Most of this work occurred with projects in the Richmond service area. The contractor cost to replace the customer owned lead service lines has ranged from \$400 to \$3,953 per service thus far, and has averaged approximately \$2,900 per service. These costs do not include Company

personnel time for Engineering, planning, construction supervision, or water quality testing. The contractor cost has included replacing the service line into the inside of the house basement for most of the services because most of the buildings thus far have had unfinished basements. The average cost could increase or decrease as work continues. Factors impacting cost could include:

1. Local codes and requirements.
2. Changes in laws, standards, and best practices.
3. Local competitive market prices.
4. Differences in construction methods and equipment in different areas.
5. Property site conditions.
6. Scope of work and building conditions for work, if any, performed through building foundation walls and within buildings.
7. Any factors impacting material and labor costs such as inflation, strikes, and events affecting the supply chain.
8. Improvements in technology.

Considering the cost factors outlined above, Indiana American estimates that the current average cost per service across Indiana American's service area would be approximately \$3,500 in 2017 dollars.

Estimated Cost of Customer Managed LSLRs on Customer Properties

The EPA October, 2016 Lead and Copper Revisions White Paper sets forth a range of the estimated cost of replacing customer owned lead service lines. The IFA, additionally, has undertaken funding of a project to replace lead service lines in the Super Fund areas of East Chicago, Indiana. Indiana American received an opinion of cost for this work from a contractor who has been performing a number of replacements for Indiana American. The estimates for a customer managed LSLR, exclusive of Indiana American's time and materials for communicating with the customers, and exclusive of the water sampling and analyses would be at least 25% higher if managed and performed for an individual homeowner. This is primarily due to savings achieved with Indiana American's work from already having equipment mobilized for the project. This results in lower costs for equipment mobilization, scheduling, and coordination. The contractor also perceives savings due to efficiencies in performing systematic ongoing service line work deriving from the ability to develop more efficient practices, techniques, and use of equipment through the sequential systematic mass work while performing work in the Indiana American managed approach. In the case of the individual home owner managing the work, costs for communicating with customers and for Indiana American performed water sampling and analyses would be additional costs to the contractor work. These costs are included in the Company's costs of managing the service line work, and would add to the cost of the home owner managed approach. Including these costs, the total cost per service in the homeowner managed approach is estimated to range between \$4,000 and \$5,500 (in 2017 dollars) and is limited to the benefit of individual homeowners as opposed to the broad education and outreach proposed here.

The approach of individual home owners managing the work presents other challenges. A primary challenge is homeowner responsiveness and coordination of their service line work with Indiana American's service line work to ensure simultaneous full service line replacement to the building in lieu of partial service line replacements, while enabling timely replacement or relocation of water mains. This is a concern because studies indicate partial lead service line replacements can result in increases in lead concentrations to buildings being served by the service line. The time and cost involved in coordinating these activities with large numbers of individual home owners could also be extraordinary. All of these additional costs are difficult to quantify but would increase the \$4,000 to \$5,500 amount estimated above.

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4. Estimated Number of Lead Mains and Lead Service Lines that are part of Indiana American's Utility System

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.

Estimated Number of Lead Mains

Indiana American Water has identified four small diameter lead mains in the distribution system serving less than 15 customers. Indiana American commenced replacing these mains in September of 2017, along with the lead services extending from these mains. The work on the replacement of the lead mains was completed in 2017.

Estimated Number of Lead Service Lines

The number of Indiana American owned lead services extending from the distribution mains to the customer property line is difficult to determine because of the state of historic paper records for these services. The Company has historic paper service records with some information for many service areas; however, historic service records do not exist for some areas. Because of the historic nature of information contained on these available records, some of the information like service line material and address may also be outdated and may no longer be accurate.

Many of the historic record addresses have been matched to premises in Indiana American's current computerized customer information system ("CIS"). The Company is also identifying a number of the historic record card addresses that cannot be matched to active premises in the Company's current CIS. Indiana American anticipates a number of these premises may no longer have a service, or may have a service line but a customer account has been inactive for longer than two years, or may have been redeveloped with a new address and a new non-lead service line. Indiana American is in the process of quantifying these circumstances.

A review of the Company's available historic service records indicates that 50,748 lead service lines from the distribution main to the property line may have been present at one time at the addresses identified. As the Company further researches the old service record addresses and determines the current state of the premises, it is anticipated that the number of lead services originally identified from these records will be reduced because a number of these premises may no longer have service or may have been redeveloped with a new address and a new non-lead service line. Indiana American could also discover an additional number of lead services through field investigations of both the Company owned portion of the service lines and the customer owned portion of the service lines. Indiana American has limited information about the portion of service line owned by the customer. It is possible that a service line from the distribution main to the house could be all non-lead, all lead, or partial lead with either the customer owned portion being lead or the Company owned portion being lead.

Nearly 65% of the count of possible lead service lines from the historic record cards are in the Northwest Indiana service area. The largest counts as a percent of total services in respective service areas are in the Winchester

District at approximately 43% of total services; the Northwest District at approximately 41% of total services; the Richmond District at approximately 26% percent of total services; and, the Terre Haute District at approximately 21% of total services.

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5. A Range of the Number of Customer Owned Lead Service Lines Estimated to be Replaced Annually

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

Indiana American completed 81 LSLRs in 2017.

Indiana American prepares and updates a five year capital investment plan each year. From this planning Indiana American currently estimates it will replace a quantity range of lead service lines in each of the next five years as shown in Table 1 below.

Table 1: Estimated Range of Number of Customer Owned Lead Service Lines to be Replaced from 2017 through 2022

Year	Range of Number of Service Lines Replaced
2017	81 (Actual)
2018	500 - 2,000
2019	1,000 - 5,000
2020	1,000 - 5,000
2021	1,500 - 5,000
<u>2022</u>	<u>1,500 - 5,000</u>
Total for period	5,581 - 22,081

Plan for Customer Owned Lead Service Line Replacement beyond Five Years

Indiana American does not prepare detailed capital investment budgets beyond a five year period; however, for the purposes of planning for LSLRs, it has prepared an estimated range of LSLRs completed by year beyond 2022, as shown in Table 2. Completion of LSLRs at the high end of the range results in completing the estimated LSLRs by year end 2027, within 10 years. Completion of LSLRs at the low end of the range results in completing the estimated number of LSLRs by year end 2041, or within 24 years.

**Table 2: Estimated Range of Number of Customer Owned Lead
Service Lines to be Replaced beyond 2022**

Year	Range of Number of Service Lines Replaced
2023	2,000 – 6,000
2024	2,000 – 6,000
2025	2,000 – 6,000
2026	2,000 – 6,000
2027	2,000 – 6,000
2028	0 – 6,000
2029	0 – 6,000
2030	0 – 6,000
2031	0 – 6,000
2032	0 – 6,000
2033	0 – 6,000
2034	0 – 6,000
2035	0 – 6,000
2036	0 – 6,000
2037	0 – 6,000
2038	0 – 6,000
2039	0 – 6,000
2040	0 – 6,000
2041	0 – 6,000

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6. A Range for the Total Feet of Lead Mains Estimated to be Replaced Annually

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

Indiana American's Lead Main Replacement Plan

As described in Section 4 of this Plan, Indiana American identified four small diameter lead mains in the distribution system. These four lead mains are approximately 475 feet in length and serve less than 15 customers. Indiana American commenced in the replacement of these mains in September of 2017, along with the lead services extending from these mains. The work on the replacement of these mains was completed in 2017. Indiana American is not aware of any other lead mains existing in its services areas. If other mains are discovered, Indiana American will schedule their replacement when they are discovered.

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7. Indiana American's Proposal for Addressing 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.

Indiana American will use any and all methods available to mitigate the need for unusual site restoration work necessitated by structures or improvements located above the customer owned portion of the lead service lines. However, there may be specific instances that necessitate unusual or extraordinary site restoration as a result of the replacement of customer owned lead service lines.

Replacement of the customer owned portion of the lead service lines might be categorized as usual or unusual with regard to what it takes to do the replacement and the related restoration.

A customer owned lead service line replacement for a specific property is designated as "Usual" if all of the following conditions exist:

Usual Replacement:

- Customer lead service line replacement and site restoration can be done with same equipment and crew expertise as used in the replacement of the Company owned portion of the lead service line; i.e., traditional excavation and grounds and pavement restoration as is done with routine main and service line replacement projects.
- Site has no unusual access requirements or structure interference that cannot be addressed with re-routing or traditional equipment and crew; i.e., requires no removal and replacement of outbuildings, fences, retaining walls, patios, pools, etc.
- Replacement requires no access inside building/home; or, access to replace a nominal length to the inside plumbing connection (i.e., shut-off, meter) does not require repair or restoration to the building/home.

If the lead service line replacement is considered "usual", the replacement and restoration will be executed by Indiana American at no cost to the customer; or, the customer can reject the offer of replacement by Indiana American. As noted in Section 8 (3) below, customers will be asked to sign a waiver if they reject the offer of replacement.

A customer owned lead service line replacement for a specific property is designated as "Unusual" if one or more of the following conditions exist:

Unusual Replacement:

- An unobstructed path allowing installation of a new underground non-lead service line on the property does not exist because of structures that interfere with the replacement (e.g., outbuildings, fences, retaining walls, patios, pools, etc.).

This premise will not be eligible for customer lead service line replacement under this program unless the customer takes whatever action is required, at customer's expense, to provide the required access for replacement. This action must be completed within the schedule set by

Indiana American in order to avoid delaying the Company's main replacement projects and replacements of lead service lines for other customers as planned and/or to avoid any increased cost resulting from such delay.

- Replacement of the customer lead service line up to the point of an inside shut-off connection or meter would require repair to the building after the lead service line replacement; i.e., repair of walls and/or drywall for a finished basement, or repair to the external wall or the foundation of the building.

In this situation, Indiana American will replace the customer lead service line as close as possible to the building/home, making the connection to existing plumbing outside the structure itself.

- Site has landscaping that would require costly replacement of trees, shrubs, flower beds, etc., resulting in restoration cost over the program allowable amount (see below).

In this case, Indiana American will complete the replacement and restoration, incurring cost up to the program allowable amount. Any further restoration will be the responsibility of the customer.

- The property is unsafe. In this situation, the homeowner will be responsible for rectifying the unsafe condition(s) prior to any work on their property.
- Any other unusual conditions which may exist will be addressed in a similar manner; i.e., requiring the customer to provide usual access for replacement, and to assume the responsibility for any restoration scope above that covered by the program allowable amount.

The program allowable amount will be \$7,000 for total cost of replacement and restoration. This amount is 200% of the midpoint for the estimated cost range (in 2017 dollars), based on actual replacements completed to date, as described in Section 3 of this Plan. The allowable amount will be adjusted at the beginning of each calendar year to reflect the Handy-Whitman Cost Trends of Water Utility Construction, North Central Region, Cost Index for Services Installed, which is updated semi-annually.

The program will not cover the cost of non-related local plumbing code upgrades such as installing pressure reducing valves or upgrading home fire protection systems. Such upgrades would be the responsibility of the customer.

The customer will be notified that an unusual site condition applies prior to providing approval for the work to begin. The customer may reject the offer of replacement if unwilling to meet the requirements for unusual replacement and restoration described above.

Unusual Site Conditions

Directional drilling and pull through methods are expected to mitigate much of any concern for unusual site restoration work. In 2017, Indiana American replaced 81 customer owned lead service lines. In the course of communicating with customers about the program, Indiana American encountered only one property owner who declined to have their lead service line replaced on their property because of concern about the life of a tree on their property. Thus, it is possible that unusual site conditions could lead to a decision by the property owner that the property owner manage the work on their property without Indiana American's involvement or funding if the property owner wants to replace the service line on their property. It is possible that other types of site conditions and concerns about restoration, unusual liability concerns, or safety concerns could lead to a similar decision by parties involved. If there is a unique replacement scenario encountered that would make a

lead service line replacement infeasible or impractical, other solutions would be investigated. Without these unusual concerns, and with customer agreement, Indiana American plans to replace customer owned lead service lines as described in this plan.

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8. Indiana American'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.

Indiana American's Communication Plan

Indiana American has developed a comprehensive communication plan for communicating with customers regarding lead and drinking water.

Lead and Drinking Water Information

Indiana American has created a webpage on its customer website, www.indianaamwater.com, in the Water Quality tab, discussing lead and drinking water. Topics on the webpage include: water treatment and corrosion control; results from lead sampling; assessing exposure to lead; minimizing exposure to lead; home treatment for lead; and testing water for lead. Additional information from outside sources is also included on the webpage. The webpage link is: <https://amwater.com/inaw/water-quality/lead-and-drinking-water>.

Communication Plan for Customers with Lead Service Lines

Indiana American has developed a comprehensive communication plan for informing customers about project work and about lead and drinking water. The communication also informs customers about lead service lines, and steps for identifying and replacing lead services lines in conjunction with Indiana American work. Communications are described in the sections below. Examples of referenced communication materials are attached in the Appendices of this plan.

1. Communications with Scheduled Utility Work

In conjunction with scheduled utility work, Indiana American mails or otherwise delivers to affected customers a communication entitled "We Are Investing in Your Neighborhood". Service lines and service line replacements are described in this communication. This communication also advises customers that Indiana American will contact them to discuss replacing their service line if it is discovered that their service line is a lead service line.

Indiana American also includes in the package a communication entitled "Important Notice About Your Water Service and Lead Service Lines". This communication describes utility owned and customer owned service lines, along with steps of service line material investigation, further communications, an overview of the lead service replacement program, frequently asked questions with answers, and further information about lead and drinking water.

2. Service Line Assessment Results

After the service line material is investigated in the field, the results of the investigation are shared with the customer, usually via a door hanger entitled "Service Line Assessment Results". The customer is asked to call the identified Indiana American representative if the service material was identified as lead. Indiana American personnel or consultant inspectors attempt to follow up with property owners who are not responsive by mail, phone call, or both.

3. Customer License Agreement to Replace Customer Owned Lead Service Line, and Lead Fact Sheet

Indiana American personnel or consultant representatives share by mail, or in person, the customer owned water service line replacement license agreement entitled "Water Service Line Replacement". Indiana American personnel or consultant representatives share details about the work and schedule and answer any questions in person or by telephone.

The license agreement describes the work, the schedule, a 12-month workmanship warranty, indemnification provisions, the provisions that the service line will continue to be owned and maintained by the customer, and acknowledgements by the customer, including an acknowledgment that they have received and read the "Important Notice About Your Water" and the "Lead" fact sheet, which is given to them at this time. The "Lead" fact sheet describes lead and drinking water, health effects, exposures to lead, ways to minimize exposure to lead, testing for lead, frequently asked questions, and further contact information.

The customer can agree to permit Indiana American to replace their lead service line by signing the license agreement. The customer can also decline to permit Indiana American to replace their lead service line, and sign the acknowledgement indicating they decline. If the customer declines to sign the acknowledgement, all relative safety and educational materials will be left with the customer, Indiana American will document the customer's choice, and will maintain that information in its records. Indiana American also maintains copies of signed license agreements.

4. Completion of Work, Water Sampling, and Sample Analysis

Indiana American recommends that immediately after the service line is replaced that the house outside hose bibb first be flushed for 30 minutes, immediately followed by a whole house flush for 30 minutes. The whole house flush includes the removal of all faucet aerators and flushing of all operating faucets in the house together for 30 minutes. In instances of lower pressure, Indiana American may recommend the whole house flush be modified to a first floor flush. The purpose of the flushing is to flush high velocity water through the pipes to remove particles that may exist in the remaining home plumbing.

Indiana American offers to customers to perform the flushing for them, and to collect a first set of samples immediately after the flushing. Indiana American sends the samples to the American Water Works Service Company certified laboratory in Belleville, Illinois (the "Lab") for analysis. The test results are shared with the customer via letter, and are shared via telephone if the results are above the EPA action level.

Indiana American also offers for the customer to collect a second set of samples within a few days after the first sample. If the customer chooses to collect the second set of samples,

Indiana American coordinates pick up of the samples from the customer and sends the samples to the Lab for analysis. Coordination of the sample pick up from the customer may include a door hanger entitled "72 Hour Water Sample Reminder". Water sample test results are shared with the customer via letter, and are also shared via telephone if the results are above the EPA action level. If the results are above the EPA action level, Indiana American offers to perform flushing, sampling, and sample analysis up to two additional times.

If the customer does not permit Indiana American to perform a whole house flush, but does permit flushing of the outside hose bibb, Indiana American will perform the hose bibb flush and collect a sample at the hose bibb but will not collect samples inside the house.

At the time the service line is replaced Indiana American also gives the customer the communication entitled "Important Notice About Your Water". This communication informs the customer that the water service line was replaced. It also describes flushing instructions, other steps for managing exposure to lead, and identifies contact information.

5. Contractor Guidance for Lead Service Line Replacement & Electrical Grounding

Indiana American reviews the scope of work with contractors and gives them a guidance sheet entitled "Lead Service Line Replacement & Electrical Grounding". This sheet reviews instructions and practices for retiring lead service lines and for managing building electrical grounding issues.

All documents listed above are attached to this Plan and listed as "Communication Materials Included with Customer Lead Service Line Replacement Plan".

**Customer Lead Service Line Replacement Plan
For Submission and Approval
January, 2018**



9. Indiana American's Proposal for Future Ownership of the Customer Owned Lead 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.

Customer Service Line Ownership

As described in the preceding section, the customer license agreement for replacing the customer owned lead service identifies that the new service line will continue to be owned and maintained by the customer.

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10. Estimated Total Cost and Annual Cost Range to Replace Customer Owned Lead Service Lines

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.

As described in Section 5 of this Plan, Indiana American prepares and updates a five year capital investment plan each year. From this planning, Indiana American currently estimates it will replace a quantity range of lead service lines in 2017 and in each of the next five years shown in Table 3 below. Based on the estimated quantity range, and an average estimated cost of \$3,500 per service, the estimated range of annual cost is shown in Table 3. The estimates are in 2017 dollars and do not account for inflation of materials and labor costs.

Table 3: Estimated Annual Cost Range of Replacing Customer Owned Lead Service Lines from 2017 through 2022

<u>Year</u>	<u>Estimated Range of Number of Service Lines Replaced</u>	<u>Estimated Range of Annual Cost (In 2017 Dollars)</u>
2017	81 (actual)	\$210,000 - \$1,050,000
2018	500 - 2,000	\$1,750,000 - \$7,000,000
2019	1,000 - 5,000	\$3,500,000 - \$17,500,000
2020	1,000 - 5,000	\$3,500,000 - \$17,500,000
2021	1,500 - 5,000	\$5,250,000 - \$17,500,000
2022	1,500 - 5,000	\$5,250,000 - \$17,500,000

As described in Section 5 of this plan, Indiana American does not prepare detailed capital investment budgets beyond a five year period. However, for the purposes of planning for LSLRs it has prepared an estimated range of LSLRs completed by year beyond the year 2022, as shown in Table 4. Completion of LSLRs at the high end of the range results in completing the estimated number of LSLRs by year 2027, within 10 years. Completion of LSLRs at the low end of the range results in completing the estimated number of LSLRs by year end 2041, or within 24 years. Based on the estimated quantity range, and an average estimated cost of \$3,500 per service, the estimated range of annual cost is shown in the Table 4 for years beyond the year 2022. The estimates are in 2017 dollars and do not account for inflation of materials and labor costs.

Table 4: Estimated Annual Cost Range of Replacing Customer Owned Lead Service Lines beyond 2022

<u>Year</u>	<u>Range of Number of Service Lines Replaced</u>	<u>Estimated Range of Annual Cost (in 2017 Dollars)</u>
2023	2,000 – 6,000	\$7,000,000 - \$21,000,000
2024	2,000 – 6,000	\$7,000,000 - \$21,000,000
2025	2,000 – 6,000	\$7,000,000 - \$21,000,000
2026	2,000 – 6,000	\$7,000,000 - \$21,000,000
2027	2,000 – 6,000	\$7,000,000 - \$21,000,000
2028	0 – 6,000	\$0 - \$21,000,000
2029	0 – 6,000	\$0 - \$21,000,000
2030	0 – 6,000	\$0 - \$21,000,000
2031	0 – 6,000	\$0 - \$21,000,000
2032	0 – 6,000	\$0 - \$21,000,000
2033	0 – 6,000	\$0 - \$21,000,000
2034	0 – 6,000	\$0 - \$21,000,000
2035	0 – 6,000	\$0 - \$21,000,000
2036	0 – 6,000	\$0 - \$21,000,000
2037	0 – 6,000	\$0 - \$21,000,000
2038	0 – 6,000	\$0 - \$21,000,000
2039	0 – 6,000	\$0 - \$21,000,000
2040	0 – 6,000	\$0 - \$21,000,000
2041	0 – 6,000	\$0 - \$21,000,000

The total estimated cost to replace 50,748 customer owned lead services at an average cost of \$3,500 per service in 2017 dollars is \$177,618,000. This does not include inflation of materials and labor. As described in Section 4 of this Plan, as Indiana American further researches the old service record addresses and determines the current state of the premises, it is anticipated that the number of lead services originally identified from these records will be reduced because a number of these premises may no longer have service or may have been redeveloped with a new address and a new non-lead service line.