
Michael W. Hassell
Principal

mhassell@postschell.com
717-612-6029 Direct
717-720-5386 Direct Fax
File #: 153108

September 15, 2020

VIA ELECTRONIC FILING

Rosemary Chiavetta
Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor North
P.O. Box 3265
Harrisburg, PA 17105-3265

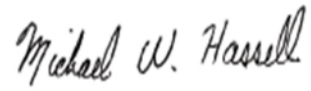
**Re: Petition of Peoples Natural Gas Company LLC and Peoples Gas Company LLC for
Approval of a Combined Distribution Long-Term Infrastructure Improvement Plan
for the Period January 1, 2021 through December 31, 2025
Docket No. P-2020-**

Dear Secretary Chiavetta:

Enclosed for filing is the Petition of Peoples Natural Gas Company LLC and Peoples Gas Company LLC (collectively the "Peoples Companies") for Approval of a Revised Long-Term Infrastructure Improvement Plan for the Period January 1, 2021 through December 31, 2025. Copies are being served on the statutory advocates, all parties of record to the Peoples Companies' most recent base rate proceeding at Docket No. R-2018-3006818, as well as all parties of record to the Peoples Companies' recent acquisition proceeding at Docket Nos A-2018-3006061, A-2018-3006062 and A-2018-3006063 as evidenced by the Certificate of Service.

Rosemary Chiavetta
September 15, 2020
Page 2

Very truly yours,

A handwritten signature in cursive script that reads "Michael W. Hassell".

Michael W. Hassell

MWH/kl
Attachment

cc: Certificate of Service

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing has been served upon the following persons, in the manner indicated, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

VIA E-MAIL ONLY

Tanya J. McCloskey, Esquire
Senior Assistant Consumer Advocate
Christy M. Appleby, Esquire
Darryl Lawrence, Esquire
Erin L. Gannon, Esquire
Office of Consumer Advocate
555 Walnut Street
Forum Place, 5th Floor
Harrisburg, PA 17101-1923

John R. Evans, Esquire
Erin K. Fure, Esquire
Sharon Webb, Esquire
Office of Small Business Advocate
555 Walnut Street
Forum Place, 1st Floor
Harrisburg, PA 17101

Richard Kanaskie, Esquire
Erika L. McLain, Esquire
Carrie B. Wright, Esquire
Stephanie Wimer, Esquire
Bureau of Investigation & Enforcement
Commonwealth Keystone Building
400 North Street, 2nd Floor West
P.O. Box 3265
Harrisburg, PA 17105-3265

Todd S. Stewart, Esquire
Hawke McKeon & Sniscak LLP
100 N. 10th Street
Harrisburg, PA 17101

Scott J. Rubin, Esquire
333 Oak Lane
Bloomsburg, PA 17815

John W. Sweet, Esquire
Elizabeth R. Marx, Esquire
Pennsylvania Utility Law Project
118 Locust Street
Harrisburg, PA 17101

Kevin J. Moody, Esquire
General Counsel & VP Government Affairs
Pennsylvania Independent Oil & Gas
Association
212 Locust Street, Suite 600
Harrisburg, PA 17101-1510

Joseph L. Vullo, Esquire
Burke Vullo Reilly Roberts
1460 Wyoming Avenue
Forty Fort, PA 18704

Linda R. Evers, Esquire
Donald R. Wagner, Esquire
Stevens & Lee
111 N. Sixth Street
Reading, PA 19601

Michael A. Gruin, Esquire
Timothy K. McHugh, Esquire
Stevens & Lee
17 N. 2nd Street, 16th Floor
Harrisburg, PA 17101

David T. Fisfis, Esquire
Tishekia Williams, Esquire
Michael Zimmerman, Esquire
Emily M. Farah, Esquire
Duquesne Light Company
411 7th Avenue, 15th Floor
Pittsburgh, PA 16219

Pamela C. Polacek, Esquire
Vasiliki Karandrikas, Esquire
Errin McCaulley, Esquire
McNees Wallace & Nurick LLC
100 Pine Street,
P.O. Box 1166
Harrisburg, PA 17108

Daniel Clearfield, Esquire
Carl R. Shultz, Esquire
Kristine E. Marsilio, Esquire
Eckert Seamans Cherin & Mellott, LLC
213 Market Street, 8th Floor
Harrisburg, PA 17101

Charis Mincavage, Esquire
McNees Wallace & Nurick LLC
100 Pine Street
P.O. Box 1166
Harrisburg, PA 17108

William H. Roberts, II, Esquire
Peoples Service Company LLC
375 North Shore Drive
Pittsburgh, PA 15212

David P. Zambito, Esquire
Jonathan P. Nase, Esquire
Cozen O'Connor
17 North Second Street, Suite 1410
Harrisburg, PA 17101

Melvin Vatz, Esquire
247 Fort Pitt Boulevard, 4th Floor
Pittsburgh, PA 15222

Tanya C. Leshko, Esquire
Alan M. Seltzer, Esquire
Buchanan, Ingersoll & Rooney PC
409 North Second Street, Suite 500
Harrisburg, PA 17101-1357

Kimberly A. Joyce, Esquire
Alexander R. Stahl, Esquire
Aqua America, Inc.
762 West Lancaster Avenue
Bryn Mawr, PA 19010

VIA FIRST-CLASS MAIL

Daniel Killmeyer
184 McKay Road
Saxonburg, PA 16056

Sean D. Ferris
406 Laurie Drive
Penn Hills, PA 15235

Samuel Givens
132 Thunderbird Drive
McKeesport, PA 15135

Charles F. Hagins
420 Goucher Street
Johnstown, PA 15905

Kathleen Tack
103 Clark Avenue
Butler, PA 16002

Gertrude Blair
207 Alameda Road
Butler, PA 16001

Lawrence Sumansky
123 Rosehaven Drive
Renfrew, PA 16053

Susan Hilliard
111 Mayfield Avenue
Butler, PA 16001

Neil Cooper
733 Center Avenue
Butler, PA 16001

Amy and John Beler
311 Country Club Road
Butler, PA 16002

Carol George
107 Graham Road
Butler, PA 16001

Megan Rummel
119 Beechwood Boulevard
Butler, PA 16001

Tim Oesterling
36 Grant Avenue
Butler, PA 16002

Charles Glendening
129 Greenhill Drive
Butler, PA 16001

Dawn Spielvogel
210 Thornley Drive
Butler, PA 16001

Michael W. Hassell

Date: September 15, 2020

Michael W. Hassell

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of Peoples Natural Gas Company :
LLC and Peoples Gas Company LLC for :
Approval of a Combined Distribution Long- : Docket No. P-2020-_____
Term Infrastructure Improvement Plan for :
the Period January 1, 2021 through :
December 31, 2025 :

**PETITION OF PEOPLES NATURAL GAS COMPANY LLC AND
PEOPLES GAS COMPANY LLC FOR APPROVAL OF A
COMBINED DISTRIBUTION LONG-TERM
INFRASTRUCTURE IMPROVEMENT PLAN**

Peoples Natural Gas Company LLC (“Peoples Natural”) and its sister company Peoples Gas Company LLC, (“Peoples Gas”) (collectively, the “Peoples Companies” or the “Companies”), file this Petition requesting approval of the Combined Distribution Long-Term Infrastructure Improvement Plan (“Combined Distribution LTIIIP”) for the period January 1, 2021 through December 31, 2025. This Combined Distribution LTIIIP proposes to replace the Peoples Companies’ currently-effective Combined Distribution LTIIIP that was approved by the Pennsylvania Public Utility Commission’s (“Commission”) order entered on January 18, 2018, at Docket Nos. P-2013-2344596, P-2013-2342745 and P-2016-2563033.¹ The Combined Distribution LTIIIP is attached hereto as Appendix “A”.

I. INTRODUCTION

1. Peoples Natural is a “public utility” and a “natural gas distribution company” as those terms are defined in Sections 102 and 2202 of the Code, 66 Pa. C.S. §§ 102, 2202. Peoples Natural Gas provides natural gas services to approximately 629,000 customers in all or portions of the following Pennsylvania counties: Allegheny, Armstrong, Beaver, Blair, Butler, Cambria,

¹ The Peoples Companies’ currently-effective LTIIIP is for the period January 1, 2017, through December 31, 2021.

Clarion, Fayette, Greene, Indiana, Jefferson, Lawrence, Mercer, Somerset, Venango, Washington and Westmoreland.

2. Peoples Gas is a “public utility” and a “natural gas distribution company” as those terms are defined in Code Sections 102 and 2202, 66 Pa. C.S. §§ 102, 2202. Peoples Gas provides natural gas services to approximately 62,600 customers throughout its service territory, which includes all or portions of the following Pennsylvania counties: Allegheny, Armstrong, Beaver, Butler, Cambria, Clarion, Clearfield, Indiana, Jefferson, and Westmoreland.

3. The names, addresses and telephone number of the Peoples Companies’ attorneys for the purposes of this filing are as follows:

Michael W. Gang (ID # 25670)
Michael W. Hassell (ID # 34851)
Garrett P. Lent (ID # 321566)
Post & Schell, P.C.
17 North Second Street
12th Floor
Harrisburg, PA 17101-1601
Phone: 717-731-1970
E-mail: mgang@postschell.com
Email: mhassell@postschell.com
E-mail: glent@postschell.com

William H. Roberts II (ID # 54724)
Peoples Natural Gas Company LLC
375 North Shore Drive
Pittsburgh, PA 15212
Phone: 412-208-6527
E-mail: William.H.RobertsII@peoples-gas.com

The Peoples Companies’ attorneys are authorized to receive all notices and communications regarding this filing.

II. SUMMARY OF COMBINED DISTRIBUTION LTIP

4. By Final Order entered January 24, 2020, at Docket No. A-2018-3006061, et. al. (the “Aqua Acquisition Proceeding”), the Commission approved the sale of the Peoples

Companies to Aqua America, Inc., now Essential Utilities, Inc. (“Essential”). The closing of this sale occurred on March 16, 2020. As part of the Non-Unanimous Settlement (“Settlement”) approved by the Final Order, the Peoples Companies committed to file a modified LTIP within six months of the close of the acquisition, which would propose to further accelerate pipeline replacement by at least \$30 million per year to replace approximately 25 additional miles per year of distribution pipe beginning in 2021. *See* Settlement ¶ 69. In addition, the Peoples Companies committed to submit a five-year plan regarding the Companies’ staffing needs to complete the increased level of projects. The Peoples Companies are filing this Combined Distribution LTIP, which reflects an acceleration of infrastructure replacement, to fulfill the requirements of the Settlement.

5. In addition to increased pipeline replacement, this Combined Distribution LTIP reflects several other modifications from the currently-effective LTIP. Consistent with the Commission’s previous orders approving prior LTIPs for the Peoples Companies, the Peoples Companies will continue to replace all “at-risk” customer-owned service lines within the scope of its LTIP projects. The projected amount of customer-owned service line replacements has increased over the 2021-2025 period commensurate with the increased replacement of distribution pipe. The Automated Meter Reading (“AMR”)/Encoder Receiver Transmitters (“ERTs”) implementation program that began in 2016 is nearing completion. Peoples Natural is now focusing on the replacement of first generation ERTs on the former Equitable Division and projects to complete this in 2020. The Peoples Companies will continue the pace of replacement and investment in measuring and regulating (“M&R”) infrastructure to further enhance service reliability. The Companies also are proposing a new program to install additional facilities related to Over Pressure Protection and have included infrastructure acquired in the acquisition

of Mountain Energy LTD (“Mountain Energy”) as distribution system improvement charge (“DSIC”) eligible property to be replaced in the future. Each of these areas is detailed in the Combined Distribution LTIP attached hereto as Appendix “A.”

6. In the Combined Distribution LTIP, the Peoples Companies address the eight elements prescribed in the Commission’s regulations at 52 Pa. Code §123.3(a).

7. The Combined Distribution LTIP proposes several changes to the deployment of the Companies’ capital spending compared to the currently-effective Combined Distribution LTIP.

8. First, the proposed Combined Distribution LTIP increases planned Mains and Services investment by \$644 million over its five-year term as compared to the combined Mains and Services investment amounts contained in the currently-effective Combined Distribution LTIP. This represents an increase from \$822.5 million for the 2017-2021 period to \$1.467 billion for the 2021-2025 period for Mains and Services.

9. Overall, the Peoples Companies are proposing total LTIP spending of \$1.556 billion for the period 2021-2025, as compared to the currently-effective five-year Combined LTIP spending plan of \$919 million. Furthermore, these increased investments may enable the completion of the replacement of at-risk pipe one year sooner than under the currently-effective Combined Distribution LTIP, *i.e.*, from 2034 to 2033.

10. Importantly, these commitments to increased levels of investment also comply with the requirements of the Settlement. Specifically, the Peoples Companies’ projected expenditures and pipeline replacement amounts for 2021 comply with the Settlement commitment to increase spending by \$30 million per year and to replace an additional 25 miles of pipeline beginning in 2021. The Companies projected LTIP spend on pipeline replacement

for 2021 is increasing from \$189.1 million as contained in the currently-effective LTIP, to \$258.1 million, an increase of \$69 million (36%). As depicted on pages four and five of Appendix A, these investments are expected to increase the projected replacement amount for 2021 from 132 miles of Mains as filed in the currently-effective LTIP to 158 miles, an increase of 26 miles (20%) during this period. Similar increases in replacement miles are also reflected for each of the years 2022-2025.

11. The Combined Distribution LTIP continues to maintain the flexibility to shift LTIP spending among the Companies without the constraints of individual entity LTIPs, in order to achieve the goal of accelerating the replacement of at-risk distribution pipe. Maintaining the combined structure will continue to allow investment to be made to replace the higher risk pipe segments without regard to Company on an annual basis, which reduces the greatest risk first. Because risk is closely aligned with the number of customers served on a pipe segment, continuing to reduce the greatest risk without regard to Company will reduce at a faster pace the number of customers served by at risk pipe.

12. In addition, the Peoples Companies plan includes the ability to adjust the total miles replaced year to year based on the logistical challenges associated with the mix of projects, specific township requirements, and availability of construction crews. Overall, the Peoples Companies propose to replace 870 miles over the 2021-2025 time period.

13. Second, while the Peoples Companies do not propose any changes to their currently-effective AMR program, this Combined LTIP affirms that the Companies will continue to work towards installing ERTs on any remaining meters and to upgrade first generation ERTs in the former Equitable Division, and that the goal is to have all meters upgraded by the end of 2020.

14. Furthermore, while the Companies already have Commission approval to include AMR technology as an LTIIIP category for the Peoples Companies, they received Commission approval to withdraw their prior proposal to recover AMR-related costs through the distribution system improvement charge (“DSIC”) mechanism with the right to present a future claim to include AMR technology costs at such time when the Companies actually install AMR support technology. As noted below, the Companies are not submitting a petition to modify their DSIC tariff to include recovery of these investments at this time, but reserve the right to do so in the future.

15. Third, the Peoples Companies are proposing to maintain the pace of M&R upgrades and improvements,² as contained in the currently-effective Combined Distribution LTIIIP. Specifically, the Peoples Companies propose to replace fifty-one (51) M&R stations per year. The planned improvements to these existing M&R stations are necessary in order to maintain safe, adequate, reliable and low-cost service for the Peoples Companies’ customers.

16. Fourth, the Combined Distribution LTIIIP proposes an Over Pressure Capital Improvement Program for regulator stations. In an effort to reduce the likelihood of future over-pressurization events, similar to the event that occurred in Merrimack, MA, in September 2018, the Companies reviewed their 640 regulated low-pressure systems, which are comprised of 4,500 miles of low-pressure pipeline and over 1,800 regulator stations, and serve over 450,000 customers. As a result of that review, the Peoples Companies are proposing to implement three project types intended to mitigate over-pressurization risks as a part of this Combined Distribution LTIIIP. The Companies will upgrade existing regulator stations by (i) adding remote pressure detection equipment to existing regulator stations, (ii) adding another form of over-

² As noted on page 8 of Appendix A, the M&R Station Upgrades/Improvements category is a separate category from the “Over Pressure Capital Improvement Program” that is proposed in the Modified Combined LTIIIP.

pressure protection as applicable such as adding relief valves or making station piping modifications, and (iii) relocating underground control lines to above-ground locations whenever possible and feasible. The Company proposes to implement this program over an 8-year period, and the total estimated plant additions and costs are approximately \$40,790,000. *See* Appendix A, pp. 11-12. This program will increase the safety and reliability of service of the Peoples Companies systems by investing in upgrades specifically targeted to mitigate the risk of over-pressurization events similar to the events that occurred in Merrimack, MA.

17. Finally, the Combined Distribution LTIP proposes to categorize 20 miles of pipeline acquired by Peoples Natural from Mountain Energy LTD on May 13, 2019 as DSIC-eligible property. In the Commission's July 21, 2016 order at Docket Nos. Nos. A-2013-2396198, A-2013-2397326, A-2013-2397328, A-2015-2507377, the Commission approved the acquisition and conditioned such approval upon the integration of Mountain Energy LTD's infrastructure into the Peoples Natural distribution system. Such integration would make these assets eligible for inclusion in the Peoples Companies' LTIP.

18. Since completing the acquisition, Peoples Natural has learned that all 20 miles of pipe in the former Mountain Energy system are in poor condition, including four (4) miles of plastic pipe noted in the records of the system. Due to the overall poor condition of the bare steel and plastic pipe involved, the Peoples Companies propose that all 20 miles be consider LTIP eligible property. By including these assets in the proposed Combined Distribution LTIP, the Peoples Companies are ensuring that at-risk pipe in poor condition is remediated or replaced on an accelerated timeframe, which will increase the safety and reliability of the service provided to the customers served on these assets.

III. DSIC RECOVERY OF CERTAIN LTIP CATEGORIES

19. The Peoples Companies' DSIC tariffs currently do not provide for recovery of investments in special meter technology (*i.e.* AMR/ERT investments) and M&R station upgrades/improvements through the existing DSIC mechanism. The Companies recognize that a claim for these costs would require the filing of a separate petition requesting modification of the DSIC mechanism. The Companies are not submitting such a petition at this time, but reserve the right to do so in the future.

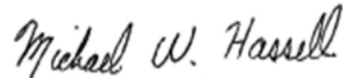
IV. SERVICE

20. Pursuant to the Commission's regulations at 52 Pa. Code § 121.4(a), the Peoples Companies are serving the Combined Distribution LTIP on the statutory advocates, all of the parties of record in the Companies' most recent base rate proceedings, and all of the parties of record in the Aqua Acquisition Proceeding.

V. CONCLUSION

Peoples Natural Gas Company LLC and Peoples Gas Company LLC respectfully request that the Commission approve this Combined Distribution Long-Term Infrastructure Improvement Plan for the Period January 1, 2021 through December 31, 2025.

Respectfully submitted,



William H. Roberts II (ID # 54724)
Peoples Natural Gas Company LLC
375 North Shore Drive
Pittsburgh, PA 15212
Phone: 412-208-6527
E-mail: William.H.RobertsII@peoples-
gas.com

Michael W. Gang (ID # 25670)
Michael W. Hassell (ID # 34851)
Garrett P. Lent (ID #321566)
Post & Schell, P.C.
17 North Second Street
12th Floor
Harrisburg, PA 17101-1601
Phone: 717-731-1970
E-mail: mgang@postschell.com
E-mail: mhassell@postschell.com
E-mail: glent@postschell.com

Dated: September 15, 2020

Counsel for Peoples Natural Gas Company
LLC and Peoples Gas Company LLC

Appendix A

THE PEOPLES COMPANIES
COMBINED DISTRIBUTION LTIIP

TABLE OF CONTENTS

INTRODUCTION.....	2
PIPELINE REPLACEMENT STRATEGY	3
STAFFING PLAN	6
AUTOMATED METER READING	8
MEASUREMENT AND REGULATING STATIONS	10
OVER PRESSURE PROTECTION	11
MOUNTAIN ENERGY AND OTHER PLASTIC PIPE	12
COMPONENTS OF THE DISTRIBUTION LTIIP.....	13

INTRODUCTION

This document is the Combined Distribution Long-Term Infrastructure Improvement Plan (“Combined Distribution LTIIIP”) of Peoples Natural Gas Company LLC (“Peoples Natural”) and its sister company Peoples Gas Company LLC, (“Peoples Gas”) (collectively, the “Peoples Companies” or the “Companies”) for the period January 1, 2021 through December 31, 2025. This Combined Distribution LTIIIP replaces the currently-approved, Combined Distribution LTIIIP for the Peoples Companies that was approved by the Pennsylvania Public Utility Commission’s (“Commission”) order entered on January 18, 2018 at Docket Nos. P-2013-2344596 and P-2013-2342745 and No. P-2016-2563033.¹

By Final Order entered January, 24, 2020, at Docket No. A-2018-3006061, et. al., the Commission approved the sale of the Peoples Companies to Aqua America, Inc., now Essential Utilities, Inc. (“Essential”). The closing of this sale occurred on March 16, 2020. As part of the Non-Unanimous Settlement (“Settlement”) approved by the Final Order, the Companies committed to file a modified LTIIIP within six months of the close of the acquisition, which would propose to further accelerate pipeline replacement by at least \$30 million per year to replace approximately 25 additional miles per year of distribution pipe beginning in 2021 (Settlement, ¶ 69). In addition, the Companies committed to submit a five-year plan regarding the Companies’ staffing needs to complete the increased level of projects. The Peoples Companies are filing this LTIIIP to fulfill the requirements of the Settlement, which reflects an acceleration of infrastructure replacement.

In addition to accelerated pipeline replacement, this Combined Distribution LTIIIP reflects several other modifications from the currently-effective LTIIIP. Consistent with the Commission’s previous orders approving prior LTIIIPs for the Peoples Companies, the Peoples Companies will continue

¹ The Peoples Companies current LTIIIP covers the period from 2017-2021.

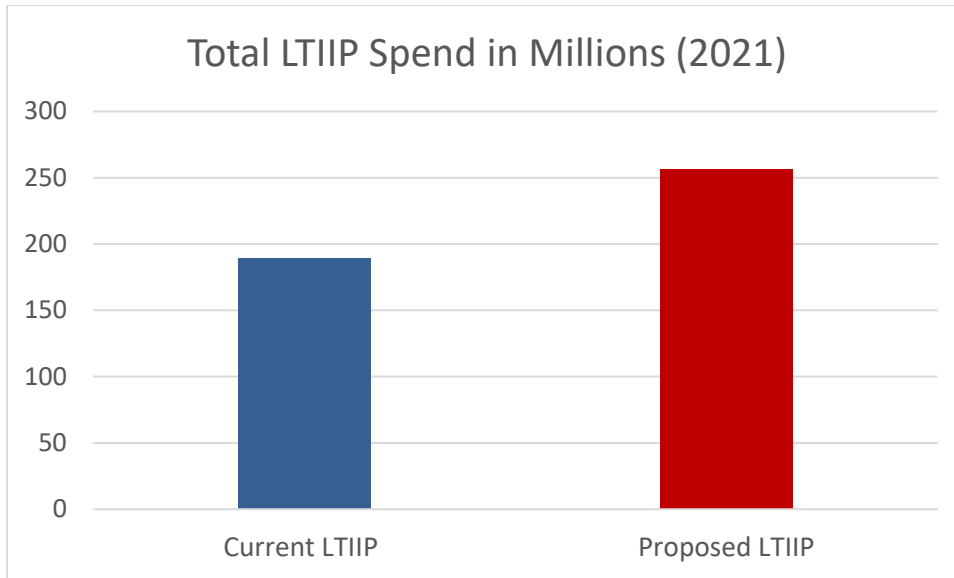
to replace all 'at-risk' customer owned service lines within the scope of its LTIP projects. The projected amount of customer-owned service line replacements has increased over the 2021 – 2025 LTIP period commensurate with the increased replacement of distribution pipe. This combined Distribution LTIP also reflects an increased emphasis on reducing the remaining bare steel DOT transmission lines. The special meter technology/ERT implementation program that began in 2016 for Peoples Natural (former Peoples Division) and Peoples Gas is nearing completion. Peoples Natural is now focusing on the replacement of first generation ERTs at Peoples Natural (former Equitable Division) and projects to complete this in 2020. The Peoples Companies will accelerate the replacement and investment in measuring and regulating (“M&R”) infrastructure to further enhance service reliability. The Companies also are proposing a new program to enhance overall gas safety and reliability by installing additional facilities related to Over Pressure Protection and have included infrastructure acquired in the acquisition of Mountain Energy LTD (“Mountain Energy”) as DSIC-eligible property to be replaced in the future. Each of these areas is detailed in the sections below.

PIPELINE REPLACEMENT STRATEGY

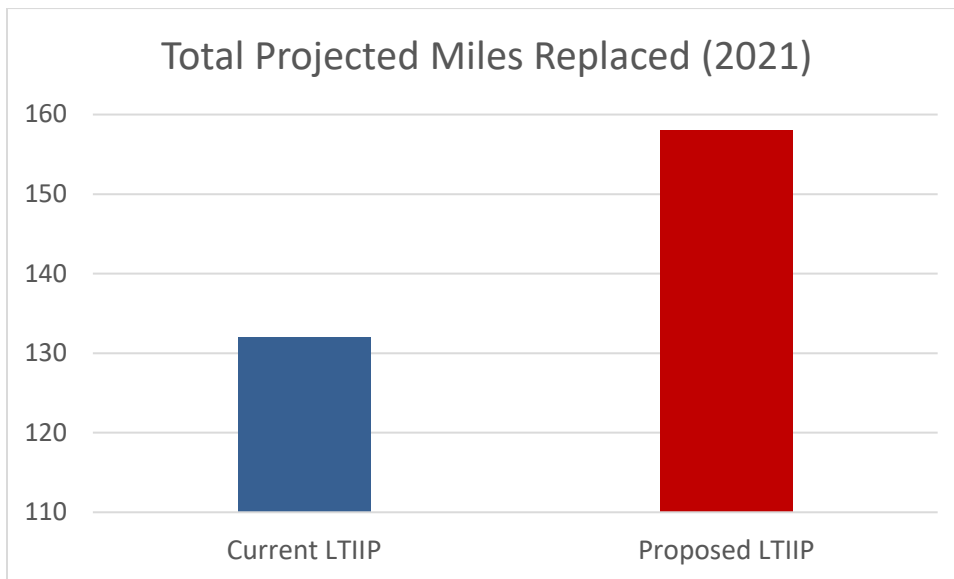
The Peoples Companies will increase main and services line investment over the current LTIP spending plans commencing in 2021 and replace all current at-risk distribution pipeline (approximately 2,740 miles) by 2034. For the five-year period covered in this Combined Distribution LTIP, the Peoples Companies will replace over 870 miles of at-risk pipe, over 42,800 company owned services and 27,400 customer owned services. The Companies will target the highest risk segments and develop projects around these segments.

The Companies' Distribution LTIPs include both distribution and transmission pipe. The Peoples Companies operate approximately 163 miles of DOT transmission pipelines, of which approximately 26 miles or 16% are bare steel. Three critical pipelines comprise the majority of these 26 miles. (One pipeline, TP7220/7300, contains 23 miles of bare steel.) Due to their operating characteristics, these three transmission pipelines are considered higher risk. They operate at higher pressure, are more prone to rupture than leaking, and are key supply pipelines serving tens of thousands of customers. For these reasons, this Combined Distribution LTIP has a focus on replacing large portions of the remaining bare steel in these three DOT transmission pipelines. During the period covered by this LTIP the Peoples Companies plan to replace approximately 17 of the remaining 26 miles or over 65%. At the end of the period covered by this LTIP only one transmission pipeline, TP7220/7300 will contain bare steel sections. (the Peoples Companies anticipate the remaining 9 miles will be replaced by the end 2029.) These transmission pipeline replacements are more expensive than distribution pipelines – often costing 3 to 7 times more.

The Peoples Companies' projected expenditures and pipeline replacement amounts for 2021 comply with the aforementioned settlement commitment of an increase of \$30 million in spend per year and, as discussed above, will average 25 miles of additional annual pipeline replacement beginning in 2021. The Companies projected LTIP spend for 2021 is increasing from \$189.1 million as contained in the current LTIP, to \$256.2 million, an increase of \$67.1 million (35%).



Also, the Companies' projected replacement amount for 2021 is increasing from 132 miles as filed in the current LTIP to 158 miles, an increase of 26 miles (20%).



This LTIP increases the five-year capital investment for Mains and Services from \$822.5 million over the 2017-2021 period to \$1.47 billion over the 2021-2025 period, an increase of \$646 million (+78%) above the current LTIP plan. In addition, Peoples Companies projected mileage replacement increases from the 2017-2021 projection of 610 miles to 870 miles over the 2021-2025 time period, an

increase of (43%) or 52 miles per year above the current plan. This projected mileage replacement reflects an average increase of slightly more than 28 miles per year above previous planned mileage replacements for the years 2021-2025. Overall, the total LTIP spending will increase from \$919 million to \$1.546 billion, an increase of \$627 million (68%). The increased investments may accelerate the completion of the replacement of at-risk pipe by one year from 2034 to 2033.

The exact number of miles replaced per year can be very challenging to target given the mix of projects, specific township requirements, availability of construction crews and a myriad of logistical challenges. The Peoples Companies plan includes the ability to adjust the total miles replaced year to year based on the logistical items outlined above. For instance, if in 2021 Peoples Companies replace 165 miles in 2021 and exceeds the 160 miles proposed then the additional miles would be reduced over the remaining 5 years of the LTIP and vice versa. Overall, Peoples Companies propose to replace 870 miles over the 2021-2025 time period given that over the 5 year period the risk reduction will still occur as outlined in this document.

STAFFING PLAN

The Peoples Companies have developed construction forecasting software that is used to build models based on the mileage of mainline pipe to be replaced to begin the planning process for each year. The model is used by construction management to establish a model of mainline pipe to be replaced, as well as, new construction pipeline. The model is driven by multiple parameters that factor in the number of miles to be replaced, the annual budget, the number of internal and external crews planned, the productivity by region, the capacity of each region, the capacity of contractors by region, the number of vehicles per crew, based on type of work, the risk of pipe, the costs by region, the cost

of construction support personnel, the capacity of the designers to work on LTIIP projects, the cost and capacity of restoration crews, the capacity to complete work by time of year, and the constraints of management and supervisors. This tool builds a forecast of the crews and resources needed to complete the mileage replacement per month, and shows variances by the multiple areas described above, in terms of the current metrics, and what is needed by the model. Multiple scenarios are then created to balance the model to meet the constraints, or to establish the need to add more crews or vehicles to a region, and/or hire more resources, either internal or external.

The aforementioned model was used as a planning tool for this Combined Distribution LTIIP and the results are summarized on the attached Appendix 1. This model was used to determine the staffing levels required to execute the accelerated plan. Additional staffing will be added in the latter half of 2020. This ramp up in 2020 will allow the staffing to be on boarded, trained, and qualified such that they can begin work in early 2021.

The Peoples Companies are positioned well in the local labor market with regard to wages, benefits and reputation. In addition, the Companies have a very low turnover rate that averages less than 2% and, therefore, do not need to expend substantial effort backfilling vacancies. Recruitment of applicants to fulfill staffing requirements in both field and support positions have been easily met through passive recruitment of applicants. In the second quarter of 2020, the Peoples Companies began recruiting candidates to fill current vacancies and build a pool of vetted candidates in anticipation of the LTIIP ramp up. The most recent job posting resulted in approximately 200 applicants. Due to the Companies' labor market position, and its effective use of screening questions during the application process, the Peoples Companies find that about 55% to 65% of applicants present as well qualified and move on to the interview phase. This also results in a high success rate

for candidates that are interviewed. Likewise, recent recruitment of support staff shows that candidate pools are strong and the Companies do not anticipate a shortage of successful candidates for these positions.

The Peoples Companies will take a two-phased approach to adding contractor crews. The first approach will be to contact the Companies' current contractors to add additional crews. The Peoples Companies currently have eight pipeline contractors who have identified that they have capacity and are willing to add additional crews as the Peoples Companies need them. The second approach will be to add new pipeline contractors to support the ramp up in construction. The Peoples Companies have five new pipeline contractors that have been identified to provide potential future additional construction crews. Initial conversations have been completed with these contractors and the Peoples Companies have informed them that they will be contacted to complete the on-boarding process as soon as the Companies have sufficient additional work to support them.

AUTOMATED METER READING

Automated Meter Reading (AMR) is a technology which allows for consistent and accurate collection of information from a natural gas meter. The technology has been available for more than 40 years, and has continued to evolve into the reliable, multi-faceted systems that are commercially available today. Readings are captured by an AMR device, a unit mounted on the natural gas meter by a trained installer. The AMR device has the ability to constantly monitor and register a customer's natural gas usage. Data is collected and transferred to a centralized database for billing purposes and/or usage analysis. This information is then used to calculate a monthly bill for the customer. AMR eliminates the need for manual meter readings and more importantly eliminates the need for an

“every other month” estimated bill. Actual readings will increase customer satisfaction by improving the accuracy of customer usage data for billing and other data collection purposes and minimize intrusion upon a customer's home or business. Over the years, as AMR technology has been refined, more natural gas distribution companies throughout the country have converted to AMR use. The majority of Natural Gas Distribution Companies in Pennsylvania are using AMR and, due to Act 129, all Electric Distribution Companies are required to implement Smart Meters.

As of August 27, 2020 Encoder Receiver Transmitters (“ERTs”) have been placed on 99.1% of Peoples Natural Gas’ meters and 98.1% of Peoples Gas’ meters. The Peoples Companies will continue to work towards installing ERTs on the remaining meters in 2020.

Peoples Natural has begun replacing the first generation ERTs (aka 40g) on the legacy Equitable Gas meters and the goal is to have all of the meters upgraded by end of 2020.

The Peoples Companies do not propose any changes to the AMR program in this Combined Distribution LTIP. While the Peoples Companies already have Commission approval to include AMR technology as an LTIP category, they received Commission approval to withdraw the proposal to recover AMR-related costs through the DSIC mechanism and reserved the right to present a future claim to recover AMR technology costs through the DSIC mechanism at such time when the Companies actually install AMR support technology. The Companies recognize that such a claim would need to be made through a separate petition that requests modification of their existing DSIC recovery mechanisms. The Companies are not submitting such a petition at this time but reserve the right to do so in the future.

M&R STATIONS

Metering and Regulating ("M&R") stations are critical points where gas pressure and delivery volumes are regulated to ensure that gas delivered into or out of a pipeline system is maintained within a specified and safe operating pressure range. M&R stations are located at points where gas is delivered between higher- and lower-pressure pipelines. An M&R station regulates or adjusts pressure and volumes from a higher-pressure transmission or distribution pipeline for delivery into a lower-pressure distribution pipeline.

Peoples Natural has 2,038 M&R stations and Peoples Gas has 714 M&R stations strategically located on the respective systems.

In its currently approved Combined Distribution LTIP, the Peoples Companies have approval for a five-year term from 2017-2021 for planning upgrades and improvements to approximately 51 M&R stations per year or 255 M&R stations in total. During the five-year term, the Peoples Companies planned to spend \$14.0 million (or \$2.8 million/year) for M&R station upgrades/improvements.

The Peoples Companies do not propose any significant changes to the pace of M&R upgrades and improvements in this Combined Distribution LTIP. The Peoples Companies project to replace 51 M&R stations per year for the duration of this LTIP and spend a total of \$15.1 million, \$3.1 million per year. The planned improvements to these existing M&R stations are necessary in order to maintain safe, adequate, reliable and low cost service for the Peoples Companies' customers. The Companies recognize that in order to recover the costs for this new category through the DSIC mechanism, a separate petition is required. The Companies are not submitting such a petition at this time but reserve the right to do so in the future.

It should be noted that the abovementioned M&R Station Upgrades/Improvements category is separate from the proposed Over Pressure Capital Improvement Program for regulating stations that is explained on page 8, which is focused on mitigating the risk of an incident similar to that which occurred in Merrimack, MA (September 2018) discussed below.

OVER-PRESSURE PROTECTION

The Merrimack, MA Incident in September 2018 and the subsequent findings/recommendations of various regulators, industry groups, and United States Senators, resulted in Operators reviewing their regulated systems and focusing on prevention of a similar incident. The Merrimack Incident involved the over pressurization of a low-pressure distribution system. The Peoples Companies operate over 640 such systems, comprised of over 4,500 miles of low-pressure pipe and over 1,800 regulator stations. The Companies' low-pressure systems serve natural gas to over 450,000 customers.

In an effort to reduce the likelihood of a similar event, the Peoples Companies propose as part of this Combined Distribution LTIIP filing to implement an Over Pressure Capital Improvement Program for regulator stations. The 8-year, \$40 million program, which begins in 2020, consists of three project types intended to mitigate over-pressurization risk: (i) adding remote pressure detection equipment, (ii) adding another form of over pressure protection such as adding relief valves or making station piping modifications depending upon what is best suited for the individual regulator station, and (iii) relocating underground control lines² (which were involved in the Merrimack Incident) to above

² Control lines are small diameter lines that connect the regulator with the downstream system to provide pressure feedback to the regulator. In general, underground control lines can extend a few feet to 30 feet or more downstream of the regulator.

ground locations whenever possible and feasible. The estimated plant additions and costs for the complete program are as follows:

Program Area	Estimated Count	Unit Cost	Ext Cost
Remote detection	960	\$10,000	\$9,600,000
Additional OPP	1145	\$22,000	\$25,190,000
Move sensor lines	500	\$12,000	\$6,000,000
Total			40,790,000

Projected spending for the term of the Revised Distribution LTIP are presented in Appendices 4 and 5.

MOUNTAIN ENERGY AND OTHER PLASTIC PIPE

On May 13, 2019 Peoples Natural finalized a transaction whereby Peoples Natural became the owner and operator of the System known as Mountain Energy in Greene County. Mountain Energy originally sought to abandon service to its 86 customers. During the pendency of the abandonment proceedings, Mountain Energy was unable to maintain service to its customers, and the Commission issued an emergency order directing Peoples Natural to maintain service. Ultimately, Peoples Natural agreed to acquire the vast majority of Mountain Energy’s facilities and customers. This system is comprised of approximately 20 miles of pipe, 73 customers, and was operated by a third party. The Commission approved the transaction on July 21, 2016 and a condition of that Agreement was that the infrastructure would be integrated into Peoples Natural’s distribution system, and therefore be eligible for the Peoples Companies’ LTIP. Peoples Natural has determined, since it became the Operator, that all 20 miles of the pipe are in poor condition, including the portions believed to be plastic. Much of the plastic pipe installed in this system by the prior operator was found to be installed above ground. Although the records of this system are very poor, they do show 4 miles of plastic pipe in the 20-mile

system. Due to the overall poor condition of both the bare steel and plastic pipe installed in the Mountain Energy System, the Peoples Companies propose that all 20 miles be considered LTIIIP eligible property and that this pipeline be replaced in accordance with the Peoples Companies' standard risk ranking process and operational conditions.

Although very much the exception, occasionally, the Peoples Companies determine, through operating experience, that some existing in service plastic pipe is at higher risk. Typically this plastic pipe is older, circa 1970s vintage, which may develop cracks over time. When the Peoples Companies identify such higher risk plastic pipe, and it is replaced, the Peoples Companies propose to count this pipe as eligible LTIIIP infrastructure replacement in terms of miles and dollars.

COMPONENTS OF THE COMBINED DISTRIBUTION LONG-TERM INFRASTRUCTURE IMPROVEMENT PLAN

Act 11 prescribed certain informational components for inclusion in the LTIIIP, and the Commission's regulations at 52 Pa. Code § 121.3(a) specify eight specific components. For purposes of this Combined Distribution LTIIIP, the impact upon these eight LTIIIP components, as a result of the changes described previously herein, are set forth and described below, in comparison to the currently approved LTIIIPs for the Peoples Companies.

1. Identification of types and age of eligible property for which the Peoples Companies will seek DSIC recovery.

Combined Distribution Appendix 2 details the types and age of all eligible pipeline property for which the Peoples Companies will seek DSIC recovery. With regard to pipeline

replacement, the Peoples Companies are not changing the plan to replace all Distribution target pipe, predominantly unprotected bare steel and cast iron pipelines, over an approximate twenty year period. As explained above, the further acceleration of mains replacement may reduce the planned replacement period by one year.

Regarding meter replacements, the Peoples Companies are not proposing to change the rate of annual meter replacements that is set forth in the currently effective LTIIP. The Companies determine their annual meter replacements based on meter test results. The meter test program that the Companies follow for diaphragm meters is the statistical sampling method set forth in 52 Pa. Code § 59.21(d). A utility that elects the statistical sampling program shall remain on that program for at least four years. For rotary meters, the Companies perform an audio and visual inspection every two years pre-1990 installation and every five years post-1990 installation and a differential test every ten years in accordance with manufacturer recommendations. The replacement of such meters occurs as a result of issues discovered as a result of this inspection process. In addition, a spin test is performed for all turbine meters once every two years and meters are replaced accordingly.

Under the statistical sampling program, the Peoples Companies divide meters into groups and then test samples from each group annually. For a group to remain in service, at least 80% of the meters in the sample test must meet Commission-required accuracy limits. If a group does not meet those limits, corrective action must be taken, which may consist of removing the entire group from service within four years. The level of meter replacement for this LTIIP was developed using the statistical sampling program. Should a meter family currently in use be condemned during the term of this LTIIP, meter replacements will increase

beyond projected levels in order to remove those meters from service within a four year period.

2. Schedule for planned repair and replacement of eligible property.

Combined Distribution Appendix 3 contains a schedule showing the strategies employed for the planned repair and replacement of DSIC-eligible plant during the five-year period covered by this LTIP. **Combined Distribution Appendix 3** is based on an analysis of equipment failures, their nature, causes, locations, analysis of reliability performance indicators, and forecasts of future reliability concerns.

3. Location of eligible property.

The table below depicts miles of pipeline in each of the five operating areas that encompass the overlapping service territory.

Location of Eligible Property	PNG	PG	Grand Total
Central	698	0	698
East	337	1	338
North	335	308	643
South	438	14	452
West	470	139	609
Grand Total	2,278	461	2,739

4. Estimate of quantity of eligible property to be improved.

Combined Distribution Appendix 4 shows the estimated quantity of property to be improved during each of the five years covered by this LTIP.

5. Projected annual expenditures to implement the LTIP and measures to ensure its cost effectiveness.

The Peoples Companies' projected annual expenditures during the term of this LTIP for DSIC eligible replacements are shown in the table contained in **Combined Distribution Appendix 5**.

6. Manner in which replacement of aging infrastructure will be accelerated and how repair, improvement or replacement will maintain adequate, efficient, safe, reliable and reasonable service.

The Peoples Companies accelerated infrastructure replacement programs began in mid-2011 for Peoples Natural with the accelerated replacement of all cast iron pipelines and in 2012 for Peoples Gas with the accelerated removal and replacement of all unprotected bare steel pipeline and associated services, and some catholically protected bare steel and the services associated with these types of pipe. These programs continue today under the currently approved Combined Distribution LTIP. The Peoples Companies' continued commitment to remove aging infrastructure and making improvements to maintain adequate, efficient, safe, reliable and reasonable service is set forth throughout this LTIP.

The repair, improvement or replacement of facilities identified in this LTIP will maintain adequate, efficient, safe, reliable and reasonable service across all companies and divisions. Historically, pipeline replacement was driven by short term operational and/or economic factors. The Peoples Companies are pursuing a long term strategy for pipeline replacements that is based on increasing the safety and reliability of the system, refocusing on the highest risk segments, while also pursuing projects that have long term benefits to system operations and reduce maintenance costs such as leak survey costs. If the Companies encounter other high

risk pipe during one of their planned replacement projects, they typically replace this pipe in order to gain efficiency and further increase the safety of the system.

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

Workforce planning and training is an ongoing process for the Peoples Companies, focused on a “best practices” approach to identifying current and projected staffing needs and required skill sets for the workforce. The following items have been put into place to address workforce needs:

Supervisor Assessment and Development Program –

The Peoples Companies require that all supervisor candidates participate in an assessment program that compares their abilities and behavior competencies to nationwide supervisory norms. Both internal and external hires participate in a comprehensive supervisor orientation and development program that introduces them to the Peoples Companies’ procedures and programs, as well as providing operator qualification (“OQ”) training regarding pipeline compliance, installation, and maintenance programs.

Training

The Peoples Companies provide technical skills training and OQ training at operating locations and a training center for field workers, and works to ensure that the qualifications and work quality meet regulatory and Company expectations. The Peoples Companies believes that this helps the Companies protect system integrity and reliability as well as public safety.

New employees receive seven weeks of training. Typically, the first week of training is their Safety Orientation followed by three weeks of training consisting of construction and maintenance fundamentals training. This includes OSHA compliance and accident prevention training as well as field construction techniques, tool and equipment operation, and other natural gas distribution field work exposure. The construction and maintenance training is complemented by three weeks of on the job training.

When these employees advance to Field Customer Service positions, a similar three-week course is provided that includes safe appliance inspection and maintenance procedures, Natural Fuel Gas Code compliance, and leak and odor investigation. The training department also conducts courses on specific equipment used in the gas distribution industry, including training from manufacturer staff experts.

Operator Qualification Training

In order to ensure that workers involved in DSIC-eligible work are qualified, the Peoples Companies have an extensive Operator Qualification (OQ) Program. The Safety and Training Department is responsible for re-qualifying one-third of the Operations' workforce each year (includes acquiring, developing, and/or providing the training that supports OQ training, maintaining qualification records, and maintaining a database of qualified individuals); tracking Role assignments and scheduling training sessions; publishing a monthly Role status report; coordinating the development and maintenance of the written Operator Qualification Program, the identification of covered tasks and abnormal operating conditions, the development of evaluation instruments, and the qualification of employees and evaluation of qualified individuals; and verifying contractor compliance.

Company hired Contractors that solely do work for the Peoples Companies are also required to adhere to federal Department of Transportation's Pipeline Safety regulations pertaining to Operator Qualification, Drug and Alcohol Testing and Program Administration, and other requirements designed to assure safe and accurate installation and operation of pipeline components.

The Peoples Companies will verify that all individuals performing covered tasks, including contractor or subcontractor employees, are qualified according to the provision of the Operator Qualification Rule. For the purposes of OQ, the term contractor includes individuals who are not Peoples Companies employees and who perform covered tasks on the Peoples Companies' facilities. Contractors recognized as "Service Line Installers" by the Peoples Companies are exempt from the requirements of this section.

Contractors shall demonstrate compliance to the Peoples Companies' safety requirements by attaining qualification through the Peoples Companies' programs held at the Companies' training facility. Evidence of compliance may include, but is not limited to:

1. Identification of qualified individuals.
2. Date current qualification was completed.
3. Additional information requested by the Peoples Companies pertaining to the qualification of individuals.

All applicable contracts will include provisions specifying contractor Operator Qualification requirements. Inspection of contractor qualification will occur at job sites or at contractor's facilities at the discretion of the Peoples Companies.

Contractors utilizing any non-English speaking employees must make provisions or provide for adequate translation capabilities prior to, and during, training and the performance of work.

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

The Peoples Companies participate in the following utility coordination and outreach activities with municipalities and other utility companies in this area:

- PA-DOT Utility – Highway Liaison Committee (UHLC);
- PA-DOT Annual planning and LET schedule meetings for coordination of projects;
- PA-DOT Individual Project Design/Utility Coordination site visits and meetings;
- PA One Call – Coordinate PA, Complex Tickets;
- PUC Public Crossings Project;
- CONNECT- "Congress of Neighboring Communities"- representatives from CONNECT member municipalities and the utilities meet for planning, networking, and coordination efforts;
- Indiana Public Service Coordinating Committee;
- Johnstown Public Service Coordinating Committee;
- Altoona Public Service Coordinating Committee;
- City of Pittsburgh Department of Mobility and Infrastructure - monthly utility co-ordination meetings;
- Annual- Individual City of Pittsburgh Council meetings on projects per ward;
- Pittsburgh Water & Sewer Authority (PWSA) - Water/Gas co-op renewal projects;
- Project Communications in local papers {i.e. print - Pittsburgh East End Newspaper};
- Allegheny County Department of Public Works- Coordination meetings for upcoming work, pending work, and active work;
- Ad hoc coordination meetings with local governments;

- The Peoples Companies' website, <https://www.peoples-gas.com/street-work/future-work.php>, is updated to reflect Interactive Mapping under the "Future Work" link which can display projects that are coming up in the next two weeks and where customers can check the status of ongoing construction;
- The Peoples Companies send letters requesting local governments to share upcoming paving plans. Responses received are integrated into the Peoples Companies' overall project planning;
- Individual Communications - Project mailings (construction letters and door hangers);
- Individual Communications - Calls are sent to Peoples Companies' customers that are involved within the project scope. These are completed as a reminder that the Companies are coming prior to construction work starting; and
- Individual door to door communications

2021 Monthly LTIP Construction Forecast Detail

Miles by Month

Program	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
LTIP	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33	159.96

LTIP Resources Needed by Month

Labor Group	Crew	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MAX
External/Contractor	Surveyors - External	56	52	43	49	52	46	49	46	49	49	56	52	56
External/Contractor	Mainline Crews - External	293	270	225	261	275	243	261	243	261	261	293	270	293
Internal/Salary	Const. Supervisors	20	20	20	20	20	20	20	20	20	20	20	20	20
Internal/Salary	Surveyors - Internal	20	20	20	20	20	20	20	20	20	20	20	20	20
Internal/Salary	Design Techs	46	46	46	46	46	46	46	46	46	46	46	46	46
Internal/Salary	Design Managers	11	11	11	11	11	11	11	11	11	11	11	11	11
Internal/Salary	Land Agents	2	2	2	2	2	2	2	2	2	2	2	2	2
Internal/Salary	Close Out Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Internal/Salary	Data Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Internal/Union	Mainline Crews - Internal	44	44	44	44	44	44	44	44	44	44	44	44	44
Internal/Union	Tie-In Crews	48	45	39	45	45	42	45	42	45	45	48	45	48
Internal/Union	Inspectors	49	45	38	44	46	41	44	41	44	44	49	45	49
Internal/Union	Welders	12	12	12	12	12	12	12	12	12	12	12	12	12
Internal/Union	Tie-In Crews - Excess	0	4	8	0	0	4	0	4	0	0	0	4	8
Internal/Union	Line Locators	8	7	6	7	7	7	7	7	7	7	8	7	8
Internal/Union	Stopper Crews	4	4	4	4	4	4	4	4	4	4	4	4	4
Internal/Union	Internal Service Crews	16	14	12	14	14	14	14	14	14	14	16	14	16

LTIP Resources Needed by Labor Type by Month

Labor Group	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MAX
External/Contractor	349	322	268	310	327	289	310	289	310	310	349	322	349
Internal/Salary	103	103	103	103	103	103	103	103	103	103	103	103	103
Internal/Union	181	175	163	170	172	168	170	168	170	170	181	175	181

LTIP Crews Needed by Month

Crew	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
Mainline Crews - Internal	11	11	11	11	11	11	11	11	11	11	11	11	11
Mainline Crews - External	65	60	50	58	61	54	58	54	58	58	65	60	58
Tie-In Crews	16	15	13	15	15	14	15	14	15	15	16	15	14
Inspectors	49	45	38	44	46	41	44	41	44	44	49	45	44
Line Locators	8	7	6	7	7	7	7	7	7	7	8	7	7
Welders	12	12	12	12	12	12	12	12	12	12	12	12	12
Const. Supervisors	20	20	20	20	20	20	20	20	20	20	20	20	20
Internal Service Crews	8	7	6	7	7	7	7	7	7	7	8	7	7
Tie-In Crews - Excess	0	1	2	0	0	1	0	1	0	0	0	1	0
Stopper Crews	2	2	2	2	2	2	2	2	2	2	2	2	2
Design Techs	46	46	46	46	46	46	46	46	46	46	46	46	46
Design Managers	11	11	11	11	11	11	11	11	11	11	11	11	11
Land Agents	2	2	2	2	2	2	2	2	2	2	2	2	2
Close Out Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Data Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Surveyors - Internal	20	20	20	20	20	20	20	20	20	20	20	20	20
Surveyors - External	56	52	43	49	52	46	49	46	49	49	56	52	49

LTIP Fleet/Tools Needed by Month

Vehicle/Tool	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MAX
Crew Truck	49	48	46	47	47	47	47	47	47	47	49	48	49
Pickup/Escape	124	119	110	117	119	114	117	114	117	117	124	119	124
Single/Tandem Axle Dump	27	27	26	26	26	26	26	26	26	26	27	27	27
Excavator	27	27	26	26	26	26	26	26	26	26	27	27	27
Trailer	27	27	26	26	26	26	26	26	26	26	27	27	27
Hammer	27	27	26	26	26	26	26	26	26	26	27	27	27
Skid Steer	27	27	26	26	26	26	26	26	26	26	27	27	27
Tamper	27	27	26	26	26	26	26	26	26	26	27	27	27
Misc Tools	27	27	26	26	26	26	26	26	26	26	27	27	27

2022 Monthly LTIP Construction Forecast Detail

Miles by Month

Program	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
LTIP	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33	159.96

LTIP Resources Needed by Month

Labor Group	Crew	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MAX
External/Contractor	Surveyors - External	52	52	43	52	49	46	52	43	49	49	56	52	56
External/Contractor	Mainline Crews - External	275	275	225	275	261	243	275	225	261	261	293	270	293
Internal/Salary	Const. Supervisors	20	20	20	20	20	20	20	20	20	20	20	20	20
Internal/Salary	Surveyors - Internal	20	20	20	20	20	20	20	20	20	20	20	20	20
Internal/Salary	Design Techs	46	46	46	46	46	46	46	46	46	46	46	46	46
Internal/Salary	Design Managers	11	11	11	11	11	11	11	11	11	11	11	11	11
Internal/Salary	Land Agents	2	2	2	2	2	2	2	2	2	2	2	2	2
Internal/Salary	Close Out Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Internal/Salary	Data Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Internal/Union	Mainline Crews - Internal	44	44	44	44	44	44	44	44	44	44	44	44	44
Internal/Union	Tie-In Crews	45	45	39	45	45	42	45	39	45	45	48	45	48
Internal/Union	Inspectors	46	46	38	46	44	41	46	38	44	44	49	45	49
Internal/Union	Welders	12	12	12	12	12	12	12	12	12	12	12	12	12
Internal/Union	Tie-In Crews - Excess	0	0	8	0	0	4	0	8	0	0	0	4	8
Internal/Union	Line Locators	7	7	6	7	7	7	7	6	7	7	8	7	8
Internal/Union	Stopper Crews	4	4	4	4	4	4	4	4	4	4	4	4	4
Internal/Union	Internal Service Crews	14	14	12	14	14	14	14	12	14	14	16	14	16

LTIP Resources Needed by Labor Type by Month

Labor Group	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MAX
External/Contractor	327	327	268	327	310	289	327	268	310	310	349	322	349
Internal/Salary	103	103	103	103	103	103	103	103	103	103	103	103	103
Internal/Union	172	172	163	172	170	168	172	163	170	170	181	175	181

LTIP Crews Needed by Month

Crew	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
Mainline Crews - Internal	11	11	11	11	11	11	11	11	11	11	11	11	11
Mainline Crews - External	61	61	50	61	58	54	61	50	58	58	65	60	58
Tie-In Crews	15	15	13	15	15	14	15	13	15	15	16	15	14
Inspectors	46	46	38	46	44	41	46	38	44	44	49	45	43
Line Locators	7	7	6	7	7	7	7	6	7	7	8	7	6
Welders	12	12	12	12	12	12	12	12	12	12	12	12	12
Const. Supervisors	20	20	20	20	20	20	20	20	20	20	20	20	20
Internal Service Crews	7	7	6	7	7	7	7	6	7	7	8	7	6
Tie-In Crews - Excess	0	0	2	0	0	1	0	2	0	0	0	1	0
Stopper Crews	2	2	2	2	2	2	2	2	2	2	2	2	2
Design Techs	46	46	46	46	46	46	46	46	46	46	46	46	46
Design Managers	11	11	11	11	11	11	11	11	11	11	11	11	11
Land Agents	2	2	2	2	2	2	2	2	2	2	2	2	2
Close Out Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Data Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Surveyors - Internal	20	20	20	20	20	20	20	20	20	20	20	20	20
Surveyors - External	52	52	43	52	49	46	52	43	49	49	56	52	49

LTIP Fleet/Tools Needed by Month

Vehicle/Tool	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MAX
Crew Truck	47	47	46	47	47	47	47	46	47	47	49	48	49
Pickup/Escape	119	119	110	119	117	114	119	110	117	117	124	119	124
Single/Tandem Axle Dump	26	26	26	26	26	26	26	26	26	26	27	27	27
Excavator	26	26	26	26	26	26	26	26	26	26	27	27	27
Trailer	26	26	26	26	26	26	26	26	26	26	27	27	27
Hammer	26	26	26	26	26	26	26	26	26	26	27	27	27
Skid Steer	26	26	26	26	26	26	26	26	26	26	27	27	27
Tamper	26	26	26	26	26	26	26	26	26	26	27	27	27
Misc Tools	26	26	26	26	26	26	26	26	26	26	27	27	27

2023 Monthly LTIP Construction Forecast Detail

Miles by Month

Program	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
LTIP	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	180.00

LTIP Resources Needed by Month

Labor Group	Crew	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MAX
External/Contractor	Surveyors - External	61	61	51	65	54	54	61	51	61	54	65	65	65
External/Contractor	Mainline Crews - External	315	315	257	333	270	284	315	257	315	275	333	333	333
Internal/Salary	Const. Supervisors	20	20	20	20	20	20	20	20	20	20	20	20	20
Internal/Salary	Surveyors - Internal	20	20	20	20	20	20	20	20	20	20	20	20	20
Internal/Salary	Design Techs	52	52	52	52	52	52	52	52	52	52	52	52	52
Internal/Salary	Design Managers	12	12	12	12	12	12	12	12	12	12	12	12	12
Internal/Salary	Land Agents	2	2	2	2	2	2	2	2	2	2	2	2	2
Internal/Salary	Close Out Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Internal/Salary	Data Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Internal/Union	Mainline Crews - Internal	44	44	44	44	44	44	44	44	44	44	44	44	44
Internal/Union	Tie-In Crews	54	54	45	57	48	48	54	45	54	48	57	57	57
Internal/Union	Inspectors	53	53	43	56	45	47	53	43	53	46	56	56	56
Internal/Union	Welders	12	12	12	12	12	12	12	12	12	12	12	12	12
Internal/Union	Tie-In Crews - Excess	0	0	12	0	12	0	0	12	0	8	0	0	12
Internal/Union	Line Locators	8	8	7	9	7	7	8	7	8	7	9	9	9
Internal/Union	Stopper Crews	4	4	4	4	4	4	4	4	4	4	4	4	4
Internal/Union	Internal Service Crews	16	16	14	18	14	14	16	14	16	14	18	18	18

LTIP Resources Needed by Labor Type by Month

Labor Group	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MAX
External/Contractor	376	376	308	398	324	338	376	308	376	329	398	398	398
Internal/Salary	110	110	110	110	110	110	110	110	110	110	110	110	110
Internal/Union	191	191	181	200	186	176	191	181	191	183	200	200	200

LTIP Crews Needed by Month

Crew	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
Mainline Crews - Internal	11	11	11	11	11	11	11	11	11	11	11	11	11
Mainline Crews - External	70	70	57	74	60	63	70	57	70	61	74	74	66
Tie-In Crews	18	18	15	19	16	16	18	15	18	16	19	19	17
Inspectors	53	53	43	56	45	47	53	43	53	46	56	56	50
Line Locators	8	8	7	9	7	7	8	7	8	7	9	9	7
Welders	12	12	12	12	12	12	12	12	12	12	12	12	12
Const. Supervisors	20	20	20	20	20	20	20	20	20	20	20	20	20
Internal Service Crews	8	8	7	9	7	7	8	7	8	7	9	9	7
Tie-In Crews - Excess	0	0	3	0	3	0	0	3	0	2	0	0	0
Stopper Crews	2	2	2	2	2	2	2	2	2	2	2	2	2
Design Techs	52	52	52	52	52	52	52	52	52	52	52	52	52
Design Managers	12	12	12	12	12	12	12	12	12	12	12	12	12
Land Agents	2	2	2	2	2	2	2	2	2	2	2	2	2
Close Out Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Data Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Surveyors - Internal	20	20	20	20	20	20	20	20	20	20	20	20	20
Surveyors - External	61	61	51	65	54	54	61	51	61	54	65	65	58

LTIP Fleet/Tools Needed by Month

Vehicle/Tool	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MAX
Crew Truck	51	51	50	53	51	48	51	50	51	50	53	53	53
Pickup/Escape	130	130	119	135	122	121	130	119	130	122	135	135	135
Single/Tandem Axle Dump	29	29	29	30	30	27	29	29	29	29	30	30	30
Excavator	29	29	29	30	30	27	29	29	29	29	30	30	30
Trailer	29	29	29	30	30	27	29	29	29	29	30	30	30
Hammer	29	29	29	30	30	27	29	29	29	29	30	30	30
Skid Steer	29	29	29	30	30	27	29	29	29	29	30	30	30
Tamper	29	29	29	30	30	27	29	29	29	29	30	30	30
Misc Tools	29	29	29	30	30	27	29	29	29	29	30	30	30

2024 Monthly LTIP Construction Forecast Detail

Miles by Month

Program	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
LTIP	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	186.00

LTIP Resources Needed by Month

Labor Group	Crew	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MAX
External/Contractor	Surveyors - External	61	61	65	57	57	65	57	57	65	54	74	65	74
External/Contractor	Mainline Crews - External	315	315	333	288	297	333	288	297	333	270	374	324	374
Internal/Salary	Const. Supervisors	20	20	20	20	20	20	20	20	20	20	20	20	20
Internal/Salary	Surveyors - Internal	20	20	20	20	20	20	20	20	20	20	20	20	20
Internal/Salary	Design Techs	54	54	54	54	54	54	54	54	54	54	54	54	54
Internal/Salary	Design Managers	13	13	13	13	13	13	13	13	13	13	13	13	13
Internal/Salary	Land Agents	2	2	2	2	2	2	2	2	2	2	2	2	2
Internal/Salary	Close Out Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Internal/Salary	Data Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Internal/Union	Mainline Crews - Internal	44	44	44	44	44	44	44	44	44	44	44	44	44
Internal/Union	Tie-In Crews	54	54	57	51	51	57	51	51	57	48	63	57	63
Internal/Union	Inspectors	53	53	56	48	50	56	48	50	56	45	62	54	62
Internal/Union	Welders	12	12	12	12	12	12	12	12	12	12	12	12	12
Internal/Union	Tie-In Crews - Excess	0	0	0	8	0	0	8	0	0	12	0	8	12
Internal/Union	Line Locators	8	8	9	8	8	9	8	8	9	7	9	9	9
Internal/Union	Stopper Crews	4	4	4	4	4	4	4	4	4	4	4	4	4
Internal/Union	Internal Service Crews	16	16	18	16	16	18	16	16	18	14	18	18	18

LTIP Resources Needed by Labor Type by Month

Labor Group	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MAX
External/Contractor	376	376	398	345	354	398	345	354	398	324	448	389	448
Internal/Salary	113	113	113	113	113	113	113	113	113	113	113	113	113
Internal/Union	191	191	200	191	185	200	191	185	200	186	212	206	212

LTIP Crews Needed by Month

Crew	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
Mainline Crews - Internal	11	11	11	11	11	11	11	11	11	11	11	11	11
Mainline Crews - External	70	70	74	64	66	74	64	66	74	60	83	72	69
Tie-In Crews	18	18	19	17	17	19	17	17	19	16	21	19	18
Inspectors	53	53	56	48	50	56	48	50	56	45	62	54	52
Line Locators	8	8	9	8	8	9	8	8	9	7	9	9	8
Welders	12	12	12	12	12	12	12	12	12	12	12	12	12
Const. Supervisors	20	20	20	20	20	20	20	20	20	20	20	20	20
Internal Service Crews	8	8	9	8	8	9	8	8	9	7	9	9	8
Tie-In Crews - Excess	0	0	0	2	0	0	2	0	0	3	0	2	0
Stopper Crews	2	2	2	2	2	2	2	2	2	2	2	2	2
Design Techs	54	54	54	54	54	54	54	54	54	54	54	54	54
Design Managers	13	13	13	13	13	13	13	13	13	13	13	13	13
Land Agents	2	2	2	2	2	2	2	2	2	2	2	2	2
Close Out Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Data Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Surveyors - Internal	20	20	20	20	20	20	20	20	20	20	20	20	20
Surveyors - External	61	61	65	57	57	65	57	57	65	54	74	65	61

LTIP Fleet/Tools Needed by Month

Vehicle/Tool	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MAX
Crew Truck	51	51	53	52	50	53	52	50	53	51	55	55	55
Pickup/Escape	130	130	135	126	126	135	126	126	135	122	143	135	143
Single/Tandem Axle Dump	29	29	30	30	28	30	30	28	30	30	32	32	32
Excavator	29	29	30	30	28	30	30	28	30	30	32	32	32
Trailer	29	29	30	30	28	30	30	28	30	30	32	32	32
Hammer	29	29	30	30	28	30	30	28	30	30	32	32	32
Skid Steer	29	29	30	30	28	30	30	28	30	30	32	32	32
Tamper	29	29	30	30	28	30	30	28	30	30	32	32	32
Misc Tools	29	29	30	30	28	30	30	28	30	30	32	32	32

2025 Monthly LTIP Construction Forecast Detail

Miles by Month

Program	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
LTIP	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	186.00

LTIP Resources Needed by Month

Labor Group	Crew	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MAX
External/Contractor	Surveyors - External	60	64	60	60	60	60	57	60	60	53	79	60	79
External/Contractor	Mainline Crews - External	311	329	306	311	311	311	297	311	311	275	396	288	396
Internal/Salary	Const. Supervisors	20	20	20	20	20	20	20	20	20	20	20	20	20
Internal/Salary	Surveyors - Internal	20	20	20	20	20	20	20	20	20	20	20	20	20
Internal/Salary	Design Techs	54	54	54	54	54	54	54	54	54	54	54	54	54
Internal/Salary	Design Managers	13	13	13	13	13	13	13	13	13	13	13	13	13
Internal/Salary	Land Agents	2	2	2	2	2	2	2	2	2	2	2	2	2
Internal/Salary	Close Out Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Internal/Salary	Data Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Internal/Union	Mainline Crews - Internal	44	44	44	44	44	44	44	44	44	44	44	44	44
Internal/Union	Tie-In Crews	51	54	51	51	51	51	51	51	51	48	66	51	66
Internal/Union	Inspectors	52	55	51	52	52	52	50	52	52	46	66	48	66
Internal/Union	Welders	12	12	12	12	12	12	12	12	12	12	12	12	12
Internal/Union	Tie-In Crews - Excess	0	0	4	0	0	0	0	0	0	4	0	20	20
Internal/Union	Line Locators	8	8	8	8	8	8	8	8	8	7	10	8	10
Internal/Union	Stopper Crews	4	4	4	4	4	4	4	4	4	4	4	4	4
Internal/Union	Internal Service Crews	16	16	16	16	16	16	16	16	16	14	20	16	20

LTIP Resources Needed by Labor Type by Month

Labor Group	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MAX
External/Contractor	371	393	366	371	371	371	354	371	371	328	475	348	475
Internal/Salary	113	113	113	113	113	113	113	113	113	113	113	113	113
Internal/Union	187	193	190	187	187	187	185	187	187	179	222	203	222

LTIP Crews Needed by Month

Crew	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
Mainline Crews - Internal	11	11	11	11	11	11	11	11	11	11	11	11	11
Mainline Crews - External	69	73	68	69	69	69	66	69	69	61	88	64	69
Tie-In Crews	17	18	17	17	17	17	17	17	17	16	22	17	17
Inspectors	52	55	51	52	52	52	50	52	52	46	66	48	52
Line Locators	8	8	8	8	8	8	8	8	8	7	10	8	8
Welders	12	12	12	12	12	12	12	12	12	12	12	12	12
Const. Supervisors	20	20	20	20	20	20	20	20	20	20	20	20	20
Internal Service Crews	8	8	8	8	8	8	8	8	8	7	10	8	8
Tie-In Crews - Excess	0	0	1	0	0	0	0	0	0	1	0	5	0
Stopper Crews	2	2	2	2	2	2	2	2	2	2	2	2	2
Design Techs	54	54	54	54	54	54	54	54	54	54	54	54	54
Design Managers	13	13	13	13	13	13	13	13	13	13	13	13	13
Land Agents	2	2	2	2	2	2	2	2	2	2	2	2	2
Close Out Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Data Analysts	2	2	2	2	2	2	2	2	2	2	2	2	2
Surveyors - Internal	20	20	20	20	20	20	20	20	20	20	20	20	20
Surveyors - External	60	64	60	60	60	60	57	60	60	53	79	60	61

LTIP Fleet/Tools Needed by Month

Vehicle/Tool	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MAX
Crew Truck	50	51	51	50	50	50	50	50	50	49	57	55	57
Pickup/Escape	128	132	128	128	128	128	126	128	128	121	149	129	149
Single/Tandem Axle Dump	28	29	29	28	28	28	28	28	28	28	33	33	33
Excavator	28	29	29	28	28	28	28	28	28	28	33	33	33
Trailer	28	29	29	28	28	28	28	28	28	28	33	33	33
Hammer	28	29	29	28	28	28	28	28	28	28	33	33	33
Skid Steer	28	29	29	28	28	28	28	28	28	28	33	33	33
Tamper	28	29	29	28	28	28	28	28	28	28	33	33	33
Misc Tools	28	29	29	28	28	28	28	28	28	28	33	33	33

Distribution Miles	2" Or Less	Over 2" thru 4"	Over 4" thru 8"	Over 8" thru 12"	Over 12"	Grand Total
Bare Steel	219	909	738	201	99	2,166
Cast Iron	0	0	0	0	28	28
Coated Steel	357	1,297	950	345	183	3,131
Copper	2	-	-	-	-	2
Plastic	1,328	2,555	1,051	63	0	4,998
Wrought Iron	3	26	22	2	1	53
Fiberglass	1	3	1	-	-	4
Unknown	3	-	-	-	2	4
Grand Total	1,911	4,790	2,763	610	313	10,387

Transmission Miles	2" Or Less	Over 2" thru 4"	Over 4" thru 8"	Over 8" thru 12"	Over 12"	Grand Total
Bare Steel	0	0	0	4	22	27
Coated Steel	0	2	6	92	27	127
Grand Total	0	2	7	96	49	153

Miles by Vintage	Distribution	Storage	Transmission	Grand Total
1940-1949	374	-	1	375
1950-1959	1,038	-	57	1,095
1960-1969	1,609	1	22	1,632
1970-1979	1,306	-	19	1,325
1980-1989	1,155	-	11	1,166
1990-1999	1,384	-	13	1,396
2000-2009	1,320	1	22	1,343
2010-2019	879	0	8	886
Pre 1940	499	-	0	499
Unknown	823	-	0	823
Grand Total	10,387	2	151	10,541

Services

Material	Unknown	1" OR LESS	Over 1" TO 2"	Over 2" TO 4"	Over 4" TO 8"	Over 8"	Total
Steel	2,257	25,193	138,873	839	164	-	167,326
Copper	18	6,456	823	3			7,300
Plastic PE	4,724	291,281	108,020	1,257	180	12	405,474
Other	32,329	1,750	7,355	56	25	1	41,516
Total	39,328	324,680	255,071	2,155	369	13	621,616

Services by Decade	
Unknown	69
Pre-1940	59,351
1940-1949	7,810
1950-1959	32,743
1960-1969	62,563
1970-1979	99,126
1980-1989	90,559
1990-1999	105,662
2000-2009	91,594
2010-2019	72,139
Total	621,616

Distribution Miles	2" Or Less	Over 2" thru 4"	Over 4" thru 8"	Over 8" thru 12"	Over 12"	Grand Total
Bare Steel	80	128	134	91	2	435
Coated Steel	76	251	251	168	21	767
Plastic	299	469	169	1	0	937
Unknown	7	9	11	0	0	27
Grand Total	461	856	565	260	24	2165

Transmission Miles	6" or Less
Coated Steel	10

Miles by Vintage	Distribution	Storage	Grand Total
1940-1949	28	-	28
1950-1959	96	-	96
1960-1969	407	-	407
1970-1979	312	2	313
1980-1989	277	2	278
1990-1999	314	-	314
2000-2009	292	6	298
2010-2019	237	0	237
Pre 1940	203	-	203
Unknown	1	-	1
Grand Total	2,165	10	2,175

<u>Services</u>							
Material	Unknown	1" OR LESS	Over 1" TO 2"	Over 2" TO 4"	Over 4" TO 8"	Over 8"	Total
Steel	-	-	13,555	34	2	-	13,591
Plastic PE	-	-	47,871	111	2	-	47,984
Total	-	-	61,427	144	4	-	61,575

Services by Decade

Unknown	-
Pre-1940	1,200
1940-1950	2,401
1950-1959	3,349
1960-1969	1,095
1970-1979	12,878
1980-1989	12,850
1990-1999	13,200
2000-2009	7,800
2010-2019	6,802
Total	61,575

	Peoples Natural Gas			Peoples Gas		
	Inside	Outside	No Indicator	Inside	Outside	No Indicator
TC Diaphragm Meters	41,336	272,640	197	1,251	55,422	20
Non TC Diaphragm Meters	39,558	295,785	12	129	7,063	14
Rotary TC	509	2254	10	2	39	
Turbine	41	129	41	0	27	10
Rotary Non TC *	480	3,961	84	17	464	51
TOTALS	81,924	574,769	344	1,399	63,015	95

*Some Non TC Rotary Meters may have been retrofitted with TC or have correctors installed compensating for temperature but no way to track.

	PNG Totals	PG Totals
Vintage Year		
Unknown		
Pre-1940	1	28
1940-1949	3	0
1950-1959	3,085	1
1960-1969	23,019	2
1970-1979	40,728	22
1980-1989	144,683	77
1990-1999	142,541	25,639
2000-2009	179,225	23,011
2010-2019	123,752	15,729

**SCHEDULE FOR PLANNED REPAIR AND REPLACEMENT
January 1, 2021 through December 31, 2025**

<u>Plant Type</u>	<u>Replacement Strategy</u>	<u>Schedule</u>
Standard Categories		
Distribution Lines (including company owned service renewals)	Replace Target Pipe within the Peoples Companies’ distribution system and associated services based upon a risk ranking prioritization approach. Such approach will be consistent and compliant with the Company’s Distribution Integrity Management Plan (“DIMP”). The approach recognizes the threat and consequences of pipeline failure as well as factors such as the population density and the density of pipelines eligible for replacement. Tracking and traceability equipment and resources will be included in these replacements.	Scheduled completion by 2034
Transmission Line Replacements	As identified, the Company will replace transmission line sections based upon prioritization of the transmission asset matrix and the internal corrosion program. In addition, as in-line inspection (i.e. smart pig runs) and pipeline reassessments are conducted, segments of transmission and storage pipelines will be replaced as require by the transmission Integrity Management Plan (TRIMP); often driven from anomalies or defects discovered during in-line inspection.	As needed
Government Relocations	Facility relocations will continue to be scheduled consistent with request from the governmental agency.	As needed

<u>Plant Type</u>	<u>Replacement Strategy</u>	<u>Schedule</u>
Meters (replacement & inside meters move outs)	Meters will be replaced according to a statistical sampling based methodology that involves meter type based risk assessments. Medium pressure inside meters will be move out during normal pipeline replacement and target areas unless restricted by state or local laws.	Ongoing
Special Considerations		
Customer service line replacements	Replace all at-risk customer service lines as the Peoples Companies repair or replace its company-owned facilities.	Scheduled completion by 2034
Reliability Improvements	As existing pipelines are replaced, improve system reliability in distribution areas that experience low pressure issues or have experienced considerable growth over the years. These areas typically have one main pipeline source of supply and present a reliability risk should there be an emergency within that single supply asset. In this case, the Reliability Improvement provides an additional source of gas supply by looping existing pipelines or extending higher pressure pipelines. Additionally, the Company plans to interconnect the systems of the Peoples Companies in areas where there have been service (pressure) or supply issues and areas in which a critical single feed exists.	As needed
M&R Station and Equipment	Upgrades and improvements to M&R stations are planned to ensure continued safe and reliable services. The replacement strategy will target those stations where age, obsolescence, malfunctions,	As needed

<u>Plant Type</u>	<u>Replacement Strategy</u>	<u>Schedule</u>
	resizing, performance, reliability, pressures changes, over pressure protection, and relocations are issues. Upgrades and revisions focused on mitigating over-pressurization risk include; moving regulator sense lines above ground (excluding regulators in vaults/pits), adding remote monitoring locations (SCADA) on low pressure systems, relocating valves to prevent relief bypass and the addition of external reliefs to closed and dead end systems.	
Other Related Capitalized Costs		
Vehicles / Tools / Equipment	Purchase incremental tools and equipment specific to the projects in this LTIP as support of an incremental increase with this filing.	As needed, with increased purchases over the 2021-2025 period.

Peoples Distribution
Long-Term Infrastructure Improvement Plan
 January 1, 2021 through December 31, 2025

Projected Quantity of Property Improved

Peoples Natural Gas

Category	2021			
Distribution Lines - Miles	142			
Company Owned Services - Count	7,000			
Transmission/Storage Lines - Miles	7			
Meter Replacement	6,000			
Customer Owned Services - Count	4,500			
Special Meter Technology	0			
M&R Station Upgrades/Improvements	40			
Category	2022	2023	2024	2025
Pipeline Replacement (Distribution, Transmission, and Reliability Improvements) - Miles	148	169	174	174
Company Owned Services - Count	8,050	8,050	9,050	9,100
Customer Owned Services - Count	5,200	5,200	5,825	5,850
Meter Replacement	6,000	6,000	6,000	6,000
M&R Station Upgrades/Improvements	40	40	40	40
Special Meter Technology / ERTs	0	0	0	0

Peoples Distribution
Long-Term Infrastructure Improvement Plan
 January 1, 2021 through December 31, 2025

Projected Quantity of Property Improved

Peoples Gas

Category	2021			
Distribution Lines - Miles	10			
Company Owned Services - Count	150			
Transmission/Storage Lines - Miles	0			
Meter Replacement	830			
Customer Owned Services - Count	85			
Special Meter Technology	0			
M&R Station Upgrades/Improvements	11			
Category	2022	2023	2024	2025
Pipeline Replacement (Distribution, Transmission, and Reliability Improvements) - Miles	11	12	12	12
Company Owned Services	320	350	375	425
Customer Owned Services - Count	180	200	215	240
Meter Replacement	830	830	830	830
M&R Station Upgrades/Improvements	11	11	11	11
Special Meter Technology / ERTs	0	0	0	0

Peoples Distribution
Long-Term Infrastructure Improvement Plan
January 1, 2021 through December 31, 2025

Peoples Distribution Appendix 5
Page 1 of 2

Projected Annual LTIP Expenditures

Peoples Natural Gas

Type (in millions \$)	2021	Applicable FERC Account No.			
Distribution Lines	121	376			
Company Owned Services	38	380			
Customer Owned Services	19				
Transmission Lines	41	367			
Government Relocations	10	Included in functional pipeline account			
Meter Replacement/Inside Meters	6	381 & 382			
Other Related Capitalized Costs					
Special Meter Technology	0.0				
Fleet	0.0				
M&R Station Upgrades / Improvements	4.9				
Grand Total	\$240.7				
Type (in millions \$)	2022	2023	2024	2025	5 year Avg.
Pipeline Replacement	\$156.2	\$228.4	\$220.5	\$220.5	\$197.6
Company Owned Services	\$39.5	\$50.7	\$56.0	\$56.0	\$48.0
Customer Owned Services	\$20.2	\$25.9	\$28.6	\$28.6	\$24.5
Government Relocations	\$10.2	\$10.1	\$10.1	\$10.1	\$10.2
Meter Replacement/Inside Meters	\$6.0	\$6.0	\$6.0	\$6.0	\$6.0
Total	\$232.0	\$321.0	\$321.1	\$321.1	\$286.2
Other Related Capitalized Costs					
Special Meter Technology	0.0	0.0	0.0	0.0	0.0
Tools	0.0	0.0	0.0	0.0	0.0
Fleet	0.0	0.0	0.0	0.0	0.0
M&R Station Upgrades/Improvements	6.2	6.8	6.8	6.8	6.3
Grand Total	\$238.2	\$327.8	\$327.9	\$327.9	\$292.5

Peoples Distribution
Long-Term Infrastructure Improvement Plan
January 1, 2021 through December 31, 2025

Peoples Distribution Appendix 5
Page 2 of 2

Projected Annual LTIP Expenditures

Peoples Gas

Type (in millions \$)	2021	Applicable FERC Account No.			
Distribution Lines	\$7.6	376			
Company Owned Services	1.4	380			
Customer Owned Services	1.0				
Transmission Lines	2.3	367			
Government Relocations	0.3	Included in functional pipeline account			
Meter Replacement/Inside Meters	1.1	381 & 382			
Other Related Capitalized Costs					
Fleet	0.0				
M&R Station Upgrades / Improvements	1.8				
Grand Total	\$15.5				
Type (in millions \$)	2022	2023	2024	2025	5 year Avg.
Pipeline Replacement	\$9.9	\$9.9	\$10.4	\$10.5	\$10.1
Company Owned Services	\$1.4	\$1.7	\$1.7	\$1.8	\$1.6
Customer Owned Services	\$1.0	\$1.2	\$1.2	\$1.2	\$1.1
Government Relocations	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3
Meter Replacement	\$1.1	\$1.1	\$1.1	\$1.1	\$1.1
Total	\$13.7	\$14.1	\$14.7	\$14.9	\$14.2
Other Related Capitalized Costs					
Tools	0.0	0.0	0.0	0.0	0.0
Fleet	0.0	0.0	0.0	0.0	0.0
M&R Station Upgrades/Improvements	2.4	2.8	2.8	2.8	2.5
Grand Total	\$16.1	\$16.9	\$17.5	\$17.7	\$16.7

VERIFICATION

I, Paul W. Becker, hereby state that the information set forth in in the foregoing is true and correct to the best of my knowledge, information and belief. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 relating to unsworn falsification to authorities.

Date: September 15, 2020



Paul W. Becker
V.P. Construction and Engineering