



PEOPLES NATURAL GAS



PEOPLES TWP

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April 11, 2016

By Overnight Delivery

RECEIVED

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
2nd Floor, Room-N201
Harrisburg, PA 17120

APR 11 2016

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

Re: Docket Nos. P-2013-2344596 and P-2013-2342745
Peoples Natural Gas Company LLC's Amended Second Revised Long-Term
Infrastructure Improvement Plan for its Peoples Division and Equitable Division

Dear Secretary Chiavetta:

Please accept for filing on behalf of Peoples Natural Gas Company LLC ("Peoples") the enclosed Amended Second Revised Long-Term Infrastructure Improvement Plan ("Amended Second Revised LTIIP").

Peoples is filing the Amended Second Revised LTIIP pursuant to the order of the Pennsylvania Public Utility Commission ("Commission") entered in these dockets on March 10, 2016 ("Order"). The Order rejected Peoples' Second Revised LTIIP and directed Peoples to either file a new or revised LTIIP consistent with the directives in the Order or to withdraw its LTIIP. Peoples has elected to revise and file an LTIIP consistent with the directives in the Order.

The enclosed Amended Second Revised LTIIP consists of a revised narrative, revised Schedule 2-A of Appendix 2, and revised Appendices 3 and 4. To assist the Commission in its review of the Amended Second Revised LTIIP, Peoples has prepared and enclosed a marked-up version of the narrative and Schedule 2-A of Appendix 2 that with underlines and strike-throughs compare these parts of the filing to the Second Revised LTIIP. Changes in Amended Second Revised Appendix 3 are in the shaded areas. Changes in Amended Second Revised Appendix 4 are in the column for 2016.

I have served copies of this filing as shown in the enclosed Certificate of Service. Please direct any questions regarding this matter to me.

Very truly yours,

William H. Roberts II

cc: Certificate of Service
Michael W. Gang, Esq.
Michael W. Hassell, Esq.

**Peoples Natural Gas Company LLC
Amended Second Revised LTIIP**

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INTRODUCTION

This document is the Amended Second Revised Long-Term Infrastructure Improvement Plan ("LTiIP") of Peoples Natural Gas Company LLC ("Peoples") for its Peoples Division and Equitable Division for the Period January 1, 2015 through December 31, 2019 ("Amended Second Revised LTiIP"). This Amended Second Revised LTiIP replaces the currently-approved, combined revised LTiIP ("Revised LTiIP") of the Peoples Division and the Equitable Division (formerly Equitable Gas Company) that was approved by Commission order entered on December 18, 2014 at Docket Nos. P-2013-2344596 and P-2013-2342745.

Prior to the merger of Equitable Gas Company into Peoples in December, 2013, both companies had proposed and received Commission approval of LTiIPs to guide the repair and replacement of aging infrastructure. In the approved merger settlement,¹ Peoples agreed to increase its capital spending levels by committing to an average of \$80 million in LTiIP capital expenditures per year for the Peoples Division for the years 2015 – 2019 and an average of \$33 million per year for the Equitable Division for the years 2015 – 2016 and an average of \$45 million per year for the Equitable Division for the years 2017 – 2019. On June 18, 2014, Peoples filed the Revised LTiIP for the combined operations of the Peoples Division and the Equitable Division. Peoples exceeded the average annual spending requirements from the merger settlement with Peoples' Revised LTiIP, which reflects an average capital investment for infrastructure improvements of \$123 million per year for the five year period from January 1, 2015 through December 31, 2019. By order entered on December 18, 2014, the Commission approved the Petition for approval of the combined Revised LTiIP for both the Peoples Division and the Equitable Division.

¹ On November 14, 2013, the Commission approved a Joint Petition for Settlement of all issues in the acquisition and merger of Equitable Gas Company at Docket Nos. A-2013-2353647, A-2015-2353649, and A-2013-2353651.

As described in more detail herein, Peoples is not proposing any changes to the combined annual spending levels for the Peoples and Equitable Divisions during the term of the approved Revised LTIP, but instead now proposes six changes to how Peoples will deploy the approved capital spending to improve its infrastructure. The six areas where Peoples is proposing to modify the Revised LTIP are: Peoples proposes to defer implementation of pipeline bar coding information technology; Peoples proposes to build an in-house construction division to perform pipeline replacement functions; Peoples proposes to replace all 'at-risk' customer owned service lines within the scope of its LTIP projects consistent with the Commission's Order at P-2013-2344596 and P-2013-2342745 beginning in 2016; Peoples proposes to focus its replacement program on pipelines in urban areas through December 31, 2019; Peoples proposes to implement a special meter technology program in 2016; and Peoples proposes to include a new LTIP category for the replacement and investment in measuring and regulating ("M&R") infrastructure to further enhance service reliability. Each of these five areas is detailed in the sections below. Also, since these changes will impact different elements of the current LTIP, the last section of the Amended Second Revised LTIP will describe how each of the required seven components of the LTIP will be impacted by the proposed modifications.

DEFERRAL OF BAR CODING INFORMATION TECHNOLOGY

The currently effective LTIP for the Peoples Division and the Equitable Division includes an approved LTIP category for pipeline bar coding information technology. This technology would enable the Company to track critical information on pipelines and related equipment and includes investment in barcoding hardware, software, and reading devices and the investment in barcodes affixed to DSIC-eligible plant.

The Peoples Division and the Equitable Division have not initiated this project and are not planning to do so at this time as a result of uncertainty created by a proposed rulemaking issued in May 2015 by the Department of Transportation's Pipeline and Hazardous Materials Safety Administration concerning regulatory requirements involving plastic piping systems used in gas services. Among other things, this rulemaking addresses possible changes regarding the traceability and tracking of plastic pipelines. The Company believes that it is prudent to defer implementation of pipeline bar coding information technology until such future time when the details, requirements, and timing regarding final regulations are known. As a result, the data provided within this Amended Second Revised LTIP no longer shows any planned expenditures for bar coding technology during the five-year LTIP period. The existing LTIP bar coding related expenditures of \$3.0 million (\$1.0 million per year for 2015 -2017) for the Peoples Division and \$3.0 million (\$1.0 million per year for 2015 -2017) for the Equitable Division will now be used for some of the expenditures for two new Amended Second Revised LTIP categories – special meter technology and M&R station upgrades.

CONSTRUCTION DIVISION

In recent years, about 20% of capital related construction work at Peoples, which includes design, planning and construction, was performed by our in-house employees and crews. Approximately 80% of this work was performed by outside independent contractors. Within the Equitable Division an even greater percentage of such capital construction work was performed by outside independent contractors. Historically, all restoration capital work for both Divisions was performed by contractors. Recently, the Company reexamined these historical practices and developed a plan to revamp the construction process by establishing a Construction Division that would perform 100% of capital related construction work at Peoples, the Equitable Division, and its sister company – Peoples TWP with in-house employees and construction crews. The Construction Division's scope of work will include design, planning, construction, and restoration. The move to an in-house staffed Construction Division will further improve the quality of capital work by reducing the cycle time of "planning to restoration", and improving the efficiency and operating costs of all construction activities.

The transition to a full Construction Division is expected to be a two year process that will continue through 2016. By the end of 2016, the Construction Division will be staffed with superintendents, managers, supervisors, technicians, and engineers as well as approximately 300 field employees that will be located throughout our service territories to handle all construction and restoration work. Approximately 220 of these field employees (including field inspectors) will be assigned to forty-five (45) construction crews, and the remaining field employees (approximately 80) will be responsible for restoration work.

To address the seasonal nature of construction work in our service territory, about 60% or 180 of the total field jobs will be staffed with “seasonal” employees who would be required to work only during the construction season months of March through December of each year. For employee benefits purposes, these seasonal employees will be considered full time employees even though they will work only ten months per year. Their pay for ten months of work will be paid over twelve months.

While the Construction Division employees will be dedicated to performing capital work, they will be made available, on a limited basis, to support O&M work activities such as emergencies and overtime call outs in order to ensure that all operations activities are done in the most cost efficient manner. Should this occur, their time would be properly tracked and charged as an O&M expense.

The Company is establishing the in-house Construction Division in order to provide the optimal level of service for our customers over the 20-year period when the Company plans to replace its entire bare steel pipe. Some of the customer benefits expected from the establishment of the Construction Division are outlined below:

- Improved quality of service and reduced construction times:
 - Develop, and better enforce, all construction performance metrics as an in-house service
 - Enhance partnering with local and regional government agencies and other utilities to improve coordination of various projects
 - Better coordination of all construction phases will reduce time between planning, design, construction, and permanent restoration

- The Company has recently partnered with a proven high quality restoration company on a transitional basis to assist with initial restoration work and provide training/oversight of Peoples Companies' new restoration employees
- Better ensure that technical skills and operator qualification training is performed and updated; avoid challenges of ensuring contractor compliance with skills/OQ training requirements
- Improved Cost Efficiencies:
 - The Peoples' Companies as well as other natural gas distribution companies in our region have begun and will continue to pursue accelerated pipeline replacement programs. Also, abundant Marcellus shale production, which is located throughout Peoples' service territory, has spurred new pipeline construction that is expected to increase over the next few years as more pipeline projects are built to ship natural gas out of our region. These initiatives have and will continue to increase the demand for pipeline contractors to perform work on the development and replacement of pipeline infrastructure. The increased demand for trained and capable pipeline contractors has increased the cost for such services and is expected to continue to increase in the coming years. Bringing this work in-house will provide insulation from this supply/demand driven cost escalation and help to control the labor costs for construction related work.

In order to outfit the newly formed construction crews, the Company will need to purchase various vehicles and miscellaneous tools/equipment including: gang trucks with compressors, trailers, backhoes, mini-excavators, dump trucks, pick-up trucks, fusion machines, pipe squeeze units, and

miscellaneous tools such as concrete saws and tamping machines. Also required are some larger items such as tri-axle tandem dump trucks, skid loaders, pipe trailers, and larger scale excavators. The company has begun purchasing these items in 2015 and expects the bulk of these purchases to occur in 2016. A breakdown of the vehicle/equipment expenditures in support of each Division are set forth in the **Second Revised Appendix 4**.

By order entered May 23, 2013 at Docket No. P-2013-2344596, Peoples received Commission approval for inclusion of Vehicles, Tools and Equipment in its initial LTIP. Due to the significantly increased scale of such purchases required to equip and set up the in-house Construction Division and the role the Construction Division will play in accelerating infrastructure improvement and controlling future cost escalation, the Company is now requesting approval to include these upfront expenditures as an approved LTIP expenditure category for years 2015 – 2017. However, the Company is not requesting at this time, nor planning to request in the future, to recover these upfront expenditures for the specific period from 2015 – 2017 through the DSIC mechanism at the time the expenditures are made. Rather, the ongoing costs for these items (i.e. depreciation) will be charged as a capital overhead cost to each individual construction project as they are used. The overhead capital costs associated with the use of these vehicles and equipment (depreciation, maintenance, and fuel) will qualify as DSIC recovery items only as they are used in support of and charged to future DSIC related projects through a clearing account process.

REPLACEMENT OF CUSTOMER OWNED SERVICE LINES WITHIN LTIP MAINLINE PROJECTS

The current Revised LTIP of the Peoples Division and the Equitable Division included costs related to the replacement of customer owned service lines that fail a pressure test required for restoration of service after Peoples has repaired or replaced its company-owned service line. The cost of the customer owned service line replacements would be included with cost of the replaced mainline. The Commission's Order dealing with the review of the originally filed Second Revised LTIP at Docket P-2013-2344596 and P-2013-2342745 directed Peoples to file a new or revised LTIP that includes a provision for the replacement of all at-risk (bare steel, copper, cast-iron, or otherwise at-risk) customer owned service lines on a going forward basis for the mainline replacement projects outlined in the LTIP. Consistent with the Commission's Order, Peoples has included the cost of replacing all at-risk customer owned service lines within the scope of the LTIP projects from 2016 through the remainder of this LTIP period.

PIPELINE REPLACEMENT STRATEGY – SHIFT TO URBAN FOCUS

The current Revised LTIP of the Peoples Division and the Equitable Division was filed shortly (six months) after the closing of the transaction that merged Equitable with Peoples. During that period of time the Company was able to conduct preliminary evaluations of the priority of infrastructure replacement for both divisions with a goal of replacing the highest risk pipelines first, without regard to the Division in which the pipeline is located. Based on these preliminary evaluations Peoples presented, in the June 2014 Revised LTIP, its pipeline replacement spending plans for the separate Peoples and Equitable Divisions. Because the Company had planned to undertake further ongoing and more in-depth pipeline replacement evaluations of both divisions following the submission of the June 2014 Revised LTIP, it sought and received Commission approval² of a provision designed to provide the Company with flexibility to better address system-wide risk across Divisions. The approved provision allows Peoples to apply the annual Division specific capital commitments on a combined basis provided that Peoples achieves the required minimum annual investments for the Equitable Division as specified in the merger settlement. More recent evaluations conducted by the Company carefully reviewed the pipeline systems of both Divisions. These evaluations measured risk by evaluating the threat and consequence of failure of pipelines and considered both population and the density of mains and service lines as factors. The results of these more recent evaluations showed that by focusing pipeline replacement in the areas of high population density with overlapping pipelines, system-wide risk can be mitigated more quickly and in the most cost effective manner.

² Commission Order entered December 18, 2014 at Docket Nos. P-2013-2344596 and P-2013-2342745.

Peoples is now presenting a modification to its Revised LTIP that reflects the recent evaluations and a shift of the planned spending to the Equitable Division to more effectively target pipeline replacements for higher risk projects located in the urban and higher population areas of the system. This modified approach will not eliminate infrastructure replacement work in non-urban areas during the period of this LTIP but will result in a more concentrated focus in the urban, duplicative pipeline areas. Along with risk reduction, the urban focus will minimize the impacts on municipalities in the pipeline replacement areas by, among other things, shortening the period of disruption due to pipeline replacement for a large number of our customers. Under the revised urban focus plan, the Company would complete bare steel pipeline replacement in the City of Pittsburgh within 5-7 years and replace or remove from service by the end of 2015 all six miles of small diameter cast iron pipeline in place on the Equitable Division system at the time of acquisition.

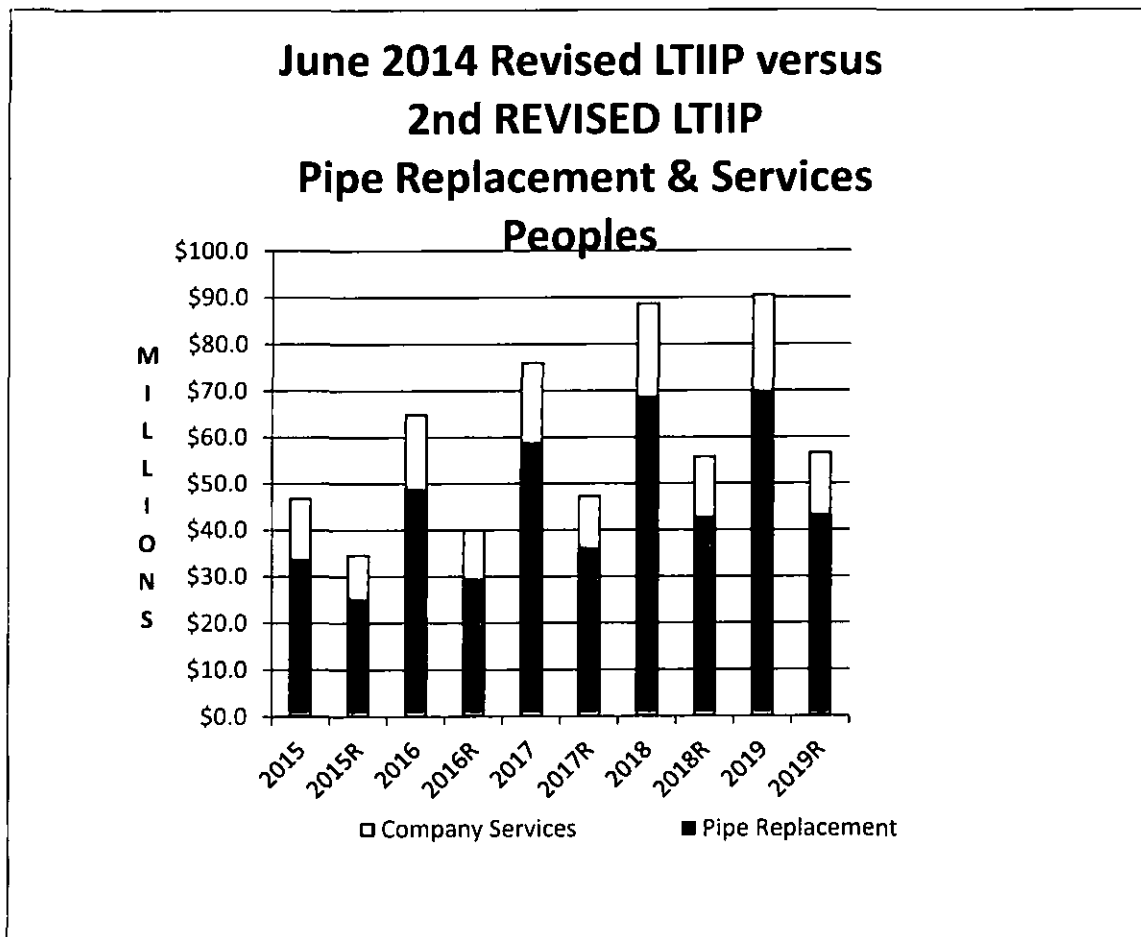
Even with the urban focus however, the operating characteristics and significant cost associated with the replacement of the existing thirty-one miles of Equitable Division large diameter pipeline (16 inch or larger) still require a measured, longer-term replacement approach. The Company plans to remove the larger diameter cast iron pipelines over a fifteen year period. This longer term replacement period for larger diameter cast iron pipelines will enable the Company to undertake a carefully phased and sequential replacement plan that will utilize pressure reinforcing interconnections between the Divisions with a proposed high pressure loop/belt system around the City of Pittsburgh that will allow for downsizing or elimination of mainline segments.

During the five year term of the Amended Second Revised LTIP, the majority of the refocused pipeline replacement work will occur in the more densely populated areas in the City of Pittsburgh and surrounding Allegheny County where much of this area is served by the Equitable Division pipeline

system. The impact of focusing more pipeline replacement work in the urban areas of our system results in a higher cost per foot of pipeline to be replaced. These cost increases are due to, among other things, tight space work areas, which decreases efficiency, significant traffic control issues, excavating through multiple hard surface layers, and significantly more extensive restoration work on both the streets where the mains are located as well as on the customer's property. The higher cost per foot to install pipelines in the urban areas, along with the costs of replacing all at-risk customer owned service lines, will reduce the total footage of pipelines to be replaced from the projected number of miles of replaced pipelines that is set forth in the currently approved Revised LTIP. The projected footage to be replaced over the Amended Second Revised LTIP period (2015 – 2019) under the proposed urban focus plan is 394 miles as compared to the currently approved revised LTIP replacements of 594 miles, a 33% reduction.

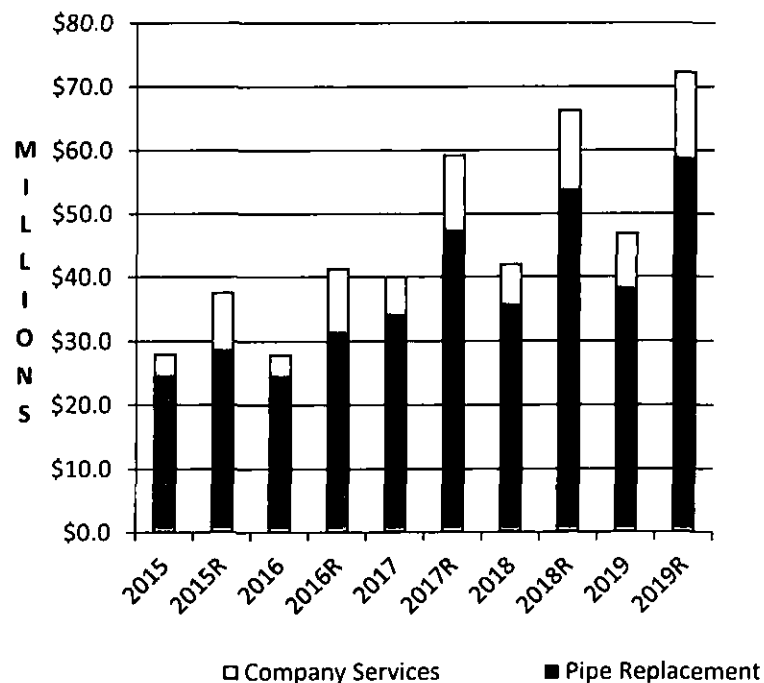
However, this focus should also help to maximize the amount of pipelines that can be abandoned and not replaced during the term of the LTIP through the ability to interconnect the pipeline systems of both divisions. As a result of the urban focus the Company has found additional efficiencies to be captured and currently projects that a total of 23 miles of urban pipeline can be abandoned without replacement over the 2016 - 2019 period. Factoring in the miles of these avoided pipelines with the miles of pipeline to be replaced under the Amended Second Revised LTIP, when compared to the June 2014 Revised LTIP, the net mileage reduction is reduced from 33% to 30%. Moreover, the reduction in miles of pipeline replaced is temporary and will be more than offset by an increase in the miles of pipeline to be replaced annually during future periods when a higher proportion of pipeline replacements will be in non-urban areas where the cost per mile of replacement is considerably lower. A similar reduction is not expected to be seen in the number of company–

owned services that will be replaced under the Amended Second Revised LTIIP. In fact, the number of services *per mile of pipeline* to be replaced under this Amended Second Revised LTIIP will increase due to the increased density of customer premises. Below are separate graphs for the Peoples Division and Equitable Division showing the shift in capital spending on pipeline replacements and company-owned service lines from the Peoples Division to the Equitable Division as a result of the revised pipeline replacement strategy³. The year by year spending as well as annual statistical information showing the impacts of the can be found in updated Second Revised Appendix 4.



³ By Order entered on December 18, 2014 in the Petition of Peoples Natural Gas Company LLC and Peoples TWP LLC for accounting and regulatory approvals and approval of related tariff revisions associated with implementation of Revised Long Term Infrastructure Plan - Docket No. P-2014-2429346, the Commission requires Peoples to provide notification if in a calendar year the capital spending under the LTIIP varies by more than 5% between the Peoples/Equitable Divisions. Peoples expects to provide this annual notice during the term of the Second Revised LTIIP as a result of the planned shift in spending to the Equitable Division.

June 2014 Revised LTIIP versus 2nd REVISED LTIIP Pipe Replacement & Services Equitable Division



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.

Peoples' original LTIP filed at Docket No. P-2013-2344596 included special meter technology as an area of "special consideration". Peoples explained that the special meter technology would likely involve an AMR technology such as Encoder Receiver Transmitters ("ERTs"), but at that time Peoples had no specific, proposed meter technology program to list in its LTIP, and Peoples intended to present a future claim to recover AMR technology costs when the Company begins installation of AMR technology. The Company further explained that during the initial years of the LTIP it planned to study the deployment of AMR technology. Peoples received Commission approval of its LTIP and the inclusion of this meter technology in the LTIP by Order entered May 23, 2013.

Peoples has undertaken further evaluation and review of the special meter technology and is now proposing to revise its approved LTIP to incorporate the installation of AMR technology. The Company is proposing a five-year program that will run from 2016 through 2020 through which it would retro-fit ERTs, using the latest technology, on all Peoples Division residential and commercial customer meters. ERTs use a packet radio protocol that will transmit data from customer meters to Company drive-by vehicles in order to collect metered usage data without a worker physically reading

each meter. Under the proposed program, ERT's would only be placed on Peoples Division customer meters and not on the meters of Equitable Division customers. Equitable Division customer meters have AMR/ERT equipment already installed. The estimated total cost of the five-year program is estimated to be \$33.0 million and consists of costs for: data logging modules on 375,000 meters, hardware such as Mobile Collectors Units and accessories, software, planning, testing, and labor for ERT mounting and installation. Peoples' first year costs (2016) are estimated to be \$5.1 million and will consist of upfront project planning and hardware and software costs of \$2.2 million, along with \$2.9 million for the ERT units and installation on an estimated 33,000 meters. The annual costs for the last four years of the plan (2017-2020) are estimated to be \$7.0 million which include ERT units and installation on the remaining customer meters. The initial rollout will utilize drive by technology and the accelerated installation of ERTs on the Peoples Division system will be strategically installed by location so that Peoples Division and Equitable Division routes can be managed in the most efficient manner. Also as part of this plan, as new meters are installed through the normal meter change process, ERTs will be installed on the replacement meters and those replacement meters will be added to drive-by-routes as soon as practicable. The Company intends to further evaluate the installation of a fixed network system in concentrated areas that would permit the real-time automated collection of meter data using wireless communications in the future.

The Company plans to redirect dollars from two areas to cover the costs related to the installation of AMR technology. First, as described previously in this Amended Second Revised LTIP, the Company is not planning to initiate its bar coding technology initiative for the Peoples Division and the Equitable Division during the term of the Amended Second Revised LTIP. Peoples proposes that the total bar coding related expenditures of \$6.0 million as set forth in the current Revised LTIP (\$3.0

million for the Peoples Division and \$3.0 million for the Equitable Division) instead be used for AMR (as well as M&R station upgrades - a new LTIP category discussed later). Second, the Company plans to use the capital cost savings generated from reductions to our pipeline replacement capital costs that were not recognized in the current approved Revised LTIP. The means for generating these cost savings were made possible by the recent Commission approvals granted in the Peoples and Peoples Equitable Division's 1307(f)-2015 proceedings at Docket Nos. R-2015-2465172 and R-2015-2465181 to merge the purchased gas cost ("PGC") rates of its two Divisions, so that beginning October 1, 2015, both Divisions would charge the same PGC rates to their customers. An important aspect of this approval is that with the merger of gas cost rates the Company will no longer be required to meter and track the physical flow of volumes delivered between the two Divisions. Prior to this change, the ability to physically interconnect the pipeline systems of both divisions was significantly limited due to the cost of measurement facilities and the inability to place measurement facilities in urban areas where most of the systems interconnect. The merging of gas cost rates, among other identified benefits, now avoids the need for measurement and will allow for the construction of many more physical interconnections between Divisions. This will enhance the operational reliability and efficiency of the systems and importantly free up additional capital by avoiding the renewal of duplicative pipelines of both Divisions ("synergy savings"). The Company now proposes in this Amended Second Revised LTIP to help finance the AMR Program (as well as M&R station upgrades) with these synergy savings without causing reductions in the miles of at risk pipelines that were intended to be removed from the systems in the current LTIP. Earlier this year the Company more closely analyzed the systems to identify those previously unavailable opportunities to interconnect the pipeline systems in the overlapping urban areas. This analysis looked at the areas of planned pipeline

replacement and initially identified approximately 23 miles of duplicative pipelines that now will no longer need to be replaced over the LTIP period from 2016 through 2019. Further ongoing analyses are expected to identify additional synergy opportunities. At an assumed urban area pipeline replacement cost of \$1.2 to \$1.5 million per mile, the initially identified 23 miles of avoided pipeline replacements could generate synergy savings from \$28 to \$35 million.

While Peoples already has Commission approval to include AMR technology as an LTIP category for the Peoples Division, it received Commission approval⁴ to withdraw its proposal to recover AMR related costs through the DSIC mechanism with the right to present a future claim to include AMR technology costs at such time when the Company actually installs AMR support technology. The Company recognizes that such a claim would need to be made through a separate petition that requests modification of its existing DSIC recovery mechanism. The Company is not submitting such a petition at this time but reserves the right to do so in the future.

There are numerous customer benefits associated with the installation of AMR technology.

They include:

- Enhanced customer convenience – natural gas meter reads are transmitted automatically without a need for a technician to access meters. This is especially convenient for customers with meters located inside a home or business that not only have to deal with meter technician access, but also have to read their meters and provide the results to the Company when their indoor meter has been inaccessible for any reason. These customers will no longer need to take time out of their busy days to accommodate Peoples;

⁴ Commission Order entered August 21, 2014 at Docket No. P-2013-2344596.

- Improved billing practices – with ERTs, customer billing is based on actual natural gas usage, not an estimate based on past consumption. Customers no longer are subject to the fluctuations that can result from estimated billing, and this will improve the customer experience, reduce the number of high bill issues and eliminate estimated bill complaints. *Estimated bills will be virtually eliminated and any human error associated with manual meter readings will be eliminated;*
- Non-registering meters would be identified and corrected quickly;
- Improve Retail Market Participation – Through access to ongoing actual monthly customer usage data, natural gas suppliers will be better able to manage natural gas supplies for their customers through improved usage targets which in turn will reduce the level of imbalance charges that ultimately are borne by shopping customers;
- Unaccounted For Gas (“UFG”) - Actual meter readings (i.e., elimination of estimated meter readings) will allow the Company to more accurately quantify UFG and identify root causes;
- Theft of Service would be much easier to detect and correct;
- Manages Operating Costs – AMR will reduce meter reading costs through the elimination of manual readings or usage verification; and
- Provides data to be used in incident investigation which provides the opportunity for quick identification or elimination of possible root causes.

M&R STATIONS

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. The Peoples Division has 1,376 M&R stations strategically located on the system. There are 662 M&R stations on the Equitable Division system.

During the five-year term of the Amended Second Revised LTIP, Peoples is planning to undertake various upgrades and improvements to the M&R stations and related M&R equipment located on both the Peoples Division and Equitable Division to ensure safe and continued reliable gas service to our customers. These upgrades and improvements may involve the replacement of the stations or the equipment at the station because of a number of factors that include: age, obsolescence, malfunctions, resizing, system operating pressure changes, performance and reliability issues, and relocation. During the five-year term of the Amended Second Revised LTIP, the Company is planning upgrades and improvements to approximately 40 M&R stations per year or 200 M&R stations in total. During the five-year term of the Amended Second Revised LTIP the Company plans to spend \$7.1 million (or \$1.4 million/year) for M&R station upgrades/improvements on the Peoples Division and \$4.1 million (or \$0.8 million/year) for M&R station upgrades/improvements on the Equitable Division.

The Company now plans to redirect a portion of LTIP dollars originally intended for bar coding technology (\$6.0 million in avoided costs) and expected capital cost "synergy savings" (\$28 to \$35

million) toward the installation of M&R station upgrades. Over the five-year term of the Amended Second Revised LTIP, these redirected costs and synergy savings will be used to cover the estimated costs of M&R station upgrades (\$11.2 million) and the AMR program (\$26.2 million).

The planned improvements to these existing M&R stations are necessary in order to maintain safe, adequate, reliable and low cost service for Peoples' customers. Accordingly, the Company proposes to include M&R station improvements as a new component of the LTIP for both the Peoples and Equitable divisions. The Company recognizes that in order to recover the costs for this new category through the DSIC mechanism, a separate petition is required. The Company is not submitting such a petition at this time but reserves the right to do so in the future.

COMPONENTS OF THE LONG-TERM INFRASTRUCTURE IMPROVEMENT PLAN

Act 11 prescribed certain informational components for inclusion in the LTIIIP. There are six required specific components as well as a seventh component related to worker qualification, as required by the Commission in its Final Implementation Order. For purposes of this Amended Second Revised LTIIIP, the impact upon these seven LTIIIP components, as a result of the changes described previously herein, are set forth and described below. A complete copy of the approved and currently effective Revised LTIIIP of the Peoples Division and Equitable Division is attached as Amended Second Revised LTIIIP Attachment 1 for comparison purposes.

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

The types and age of eligible pipeline property for which Peoples will seek DSIC recovery remains unchanged as a result of the proposed changes set forth within this Amended Second Revised LTIIIP. With regard to pipeline replacement, the Company is not currently changing its plan to replace all target pipe, predominantly unprotected bare steel and cast iron pipelines, over an approximate twenty year period. However, as described earlier, the Peoples' replacement program will now focus on more pipeline replacements of the highest risk pipe located in urban areas during the term of this LTIIIP. While this will result in less miles of pipelines being replaced than projected in the June 2014 Revised LTIIIP for the period from 2015 – 2019, primarily as a result of replacing lines in higher cost areas including the replacement of all at-risk customer owned service lines, it will more effectively reduce system-wide risk. Conversely, in the years following 2019, the total miles of pipelines to be replaced will increase as at-risk pipelines are replaced in the less-urban areas. This revised focus is consistent with

the main objective of reducing system risk and maintaining system integrity, reliability and safety. The refocusing of the LTIP to urban areas will maximize the reduction in system wide risk and maximize cost saving opportunities in areas with duplicative pipe. In light of the additional customer service line replacements included in this Amended Second Revised LTIP, the Company will revisit the timeframe for total replacement of all at-risk infrastructure and may elect to extend the replacement term at the filing of the next 5 year segment of its LTIP. The next two years will provide Peoples valuable experience with replacing all at-risk customer service lines and determining the full impact of this change on the replacement timeframe.

Regarding meter replacements, Peoples is not proposing to change the rate of annual meter replacements that is set forth in the Revised LTIP. Such changes will continue to be based on meter testing results based on a statistical sampling method that is described within the June 2014 Revised LTIP. As described earlier in the Amended Second Revised LTIP, Peoples is proposing to adopt a five year AMR program that will install ERT units on all Peoples Division meters.

The Company is proposing to include Distribution and Transmission M&R Stations as a new category for inclusion in the LTIP. The Peoples and Equitable Divisions currently operate 2,038 distribution and transmission M&R stations located throughout its systems. Of these, 1,376 are located on the Peoples Division system and 662 are located on the Equitable Division system. Over the five year period of the Amended Second Revised LTIP, the Company projects that about 200 of these existing M&R stations will require upgrades or improvements to ensure continued safe, adequate and reliable service.

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

Second Revised Appendix 2-A contains a schedule showing the strategies employed for the planned repair and replacement of DSIC-eligible plant during the 5-year period covered by the Amended Second Revised LTIP. **Second Revised Appendix 2-A** is based on an analysis of equipment failures, their nature, causes, locations, analysis of reliability performance indicators, and forecasts of future reliability concerns. Revisions to this schedule, as a result of the modifications discussed within the Amended Second Revised LTIP, are shown in redline form for easy reference.

3. Location of eligible property.

The revisions proposed in this revised LTIP to include AMR, shift the pipeline replacement focus to urban areas and to bring construction in-house will not result in any changes to the location of eligible property as originally considered in the June 2014 Revised LTIP. In this Amended Second Revised LTIP, Peoples is now proposing that upgrades and improvements to existing M&R stations located on the Peoples and Equitable Division system be included as a new LTIP category. The locations of the approximate 200 M&R stations that are planned for upgrades and improvements over the course of the 2015 – 2019 LTIP period are fairly equally dispersed across the systems of the Peoples and Equitable Divisions.

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

Second Revised Appendix 3 shows the estimated quantity of property to be improved during each of the five years covered by this revised LTIP.

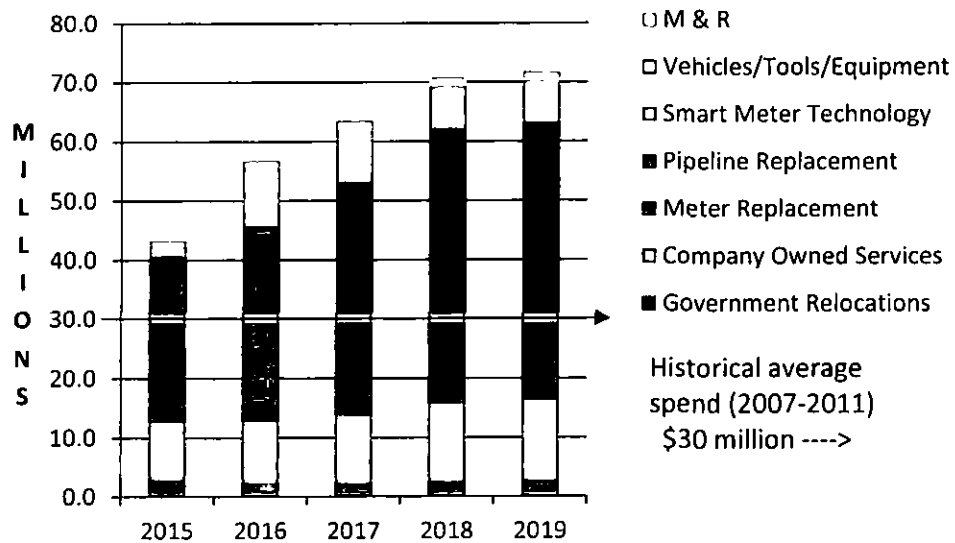
5. Projected annual expenditures to implement the LTIP and measures to ensure its cost effectiveness.

Peoples' projected annual expenditures during the term of the LTIP for DSIC eligible replacements are shown in the table contained in **Second Revised Appendix 4**. Information on the measures to ensure the LTIP's cost effectiveness is set forth in this same section of the June 2014 Revised LTIP. In addition to these existing measures and as described previously in the Amended Second Revised LTIP, the Company is proposing to establish an in-house Construction Division to further improve the quality of capital work, reduce the cycle time of "planning to restoration", and improve the efficiency and operating costs of all construction activities.

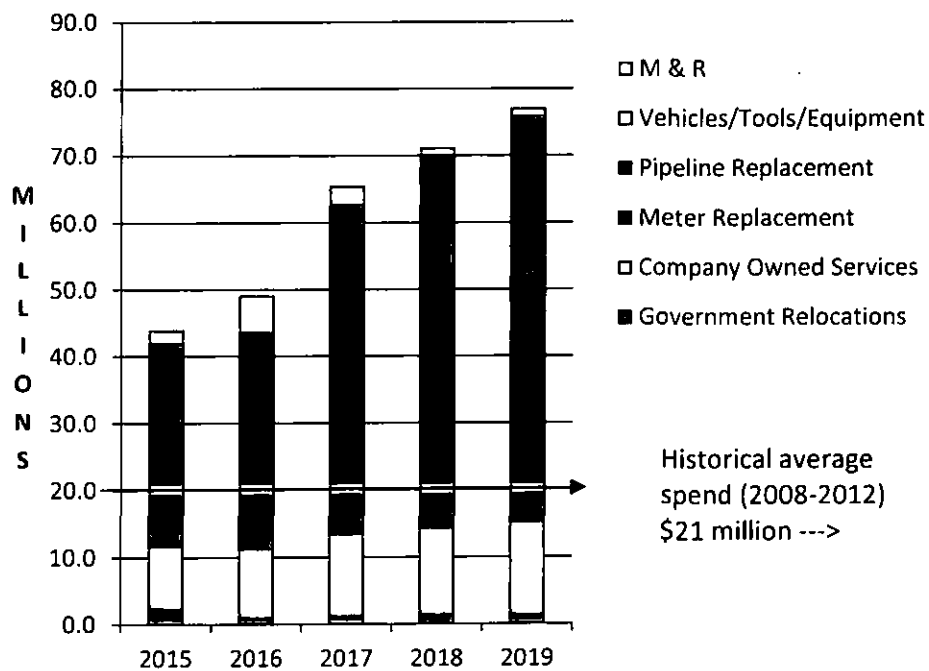
6. Manner in which replacement of aging infrastructure will be accelerated and how repair, improvement or replacement will maintain adequate, efficient, safe, reliable and reasonable service.

Peoples' accelerated infrastructure replacement program began in mid-2011 with the replacement of all cast iron pipelines and continues today under the currently approved LTIP. Peoples' continued commitment to remove aging infrastructure at the Peoples and Equitable Divisions and making improvements to maintain adequate, efficient, safe, reliable and reasonable service is set forth throughout this Amended Second Revised LTIP. The expected acceleration of the replacement of the Company's aging infrastructure and additions for improvement as proposed within this Amended Second Revised LTIP are illustrated in the following graphs.

2nd REVISED LTIIP Projected Expenditures Peoples Division



2nd REVISED LTIIP Projected Expenditures Equitable Division



The repair, improvement or replacement of facilities identified in this revised LTIP will maintain adequate, efficient, safe, reliable and reasonable service across both Divisions. Historically, pipeline replacement was driven by short term operational and/or economic factors. The Company is pursuing a long term strategy for pipeline replacements that is based on increasing the safety and reliability of the system, refocusing in the short term to urban areas, while also pursuing projects that have long term benefits to system operations and reduce maintenance costs such as leak survey costs. If the Company encounters other high risk pipe during one of its planned replacement projects, it typically replaces this pipe in order to gain efficiency and further increase the safety of the system.

- 7. Plan to ensure that work to repair, improve, or replace eligible property is performed by qualified employees of the utility or independent contractor to protect system reliability and public safety.**

Information in response to this LTIP component as presented and approved in the June 2014 Revised LTIP are unchanged by this Amended Second Revised LTIP. Peoples is establishing a Construction Division that will eventually perform all construction activities in-house. This approach will help to ensure that technical skills and operator qualification training is performed and updated and will avoid the challenges of ensuring contractor compliance with skills/OQ training requirements.

SCHEDULE FOR PLANNED REPAIR AND REPLACEMENT
January 1, 2015 through December 31, 2019

<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 distribution system and associated services based upon a risk ranking prioritization approach. Such approach will be consistent and compliant with the Company's <i>Distribution Integrity Management Plan</i> ("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.	20 years – Schedule may be extended as result of PUC Order that directs the company to replace at-risk customer services.
Gathering Line Replacements	Replace all bare unprotected steel gathering lines based upon a risk ranking prioritization approach.	20 years – Schedule may be extended as result of PUC Order that directs the company to replace at-risk customer services.
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. These replacements are over and above the requirements of the DOT-mandated Transmission Pipeline Integrity Program, which only applies to High Consequence Areas.	As needed
Improvement to Facilitate Pipeline Integrity	As future in-line inspections (i.e., smart pig runs) and pipeline reassessments are conducted, segments of transmission and storage pipelines will be replaced as required by the Transmission	Ongoing

Plant Type	Replacement Strategy	Schedule
	Integrity Management Plan (TRIMP). Such segments that would be replaced would be as a result of anomalies or defects discovered from future in-line inspections. The segments targeted will be prioritized based upon bare steel segments, leak history, etc. over and above Pipeline Integrity.	
Government Relocations	Facility relocations will continue to be scheduled consistent with request from the governmental agency.	As needed
Meters (replacement)	Meters will be replaced according to a statistical sampling based methodology that involves meter type based risk assessments.	Ongoing
Special Considerations		
Customer service line replacements	Replace all at-risk customer service lines as Peoples has repaired or replaced its company-owned facilities.	20 years - Schedule may be extended as result of PUC Order that directs the company to replace at-risk customer services.
Special Meter Technology	The Company is undertaking a system-wide project that will result in the installation of automated meter reading technology on all customer meters on the Peoples Division system.	This project will begin in 2016 and continue through 2020.
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	As needed

<u>Plant Type</u>	<u>Replacement Strategy</u>	<u>Schedule</u>
	an additional source of gas supply by looping existing pipelines or extending higher pressure pipelines. Additionally, the Company plans to interconnect the systems of both Divisions in areas where there have been service (pressure) or supply issues and <i>areas in which a critical single feed exists.</i>	
M&R Station Stations 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, resizing, performance, reliability, pressures changes and relocations are issues.	As needed
Other Related Capitalized Costs		
Vehicles / Tools / Equipment	Purchase incremental tools and equipment specific to the projects in this LTIP. The Company also plans to significantly increase its purchases of vehicles, tools and equipment over the 2015 – 2017 time frames in support of its Construction Division.	As needed, with increased purchases over the 2105 – 2017 period
Bar Coding/Mapping and Material Tracking Technology	The Company does not currently have bar coding and the supporting integrated systems. At this time the Company is not planning to undertake the purchase and installation of this technology during the term of this LTIP but does plan to reevaluate the use of this technology in the future.	Not planned at this time

AMENDED SECOND REVISED
Long-Term Infrastructure Improvement Plan
January 1, 2015 through December 31, 2019

Amended Second Revised Appendix 3

Projected Quantity of Property Improved

Peoples Division

Category	2015			
Distribution Lines - Miles	33			
Company Owned Services - Count	2,700			
Gathering Lines - Miles	6			
Transmission/Storage Lines - Miles	3			
Meter Replacement	6,600			
Customer Owned Services - Count	300			
Smart Meter Technology	0			
M&R Station Upgrades/Improvements	33			
Category	2016	2017	2018	2019
Pipeline Replacement (Distribution, Transmission, Gathering, and Reliability Improvements) - Miles	34	39	46	46
Company Owned Services	4,650	5,360	5,600	5,400
Meter Replacement	4,200	5,000	5,900	6,100
M&R Station Upgrades/Improvements	35	48	27	27
Smart Meter Technology / ERTs	33,000	85,500	85,500	85,500

Equitable Division

Category	2015			
Distribution Lines - Miles	24			
Company Owned Services - Count	2,850			
Gathering Lines - Miles	2			
Transmission/Storage Lines - Miles	1			
Meter Replacement	4,100			
Customer Owned Services - Count	560			
Smart Meter Technology	0			
M&R Station Upgrades/Improvements	5			
Category	2016	2017	2018	2019
Pipeline Replacement (Distribution, Transmission, Gathering, and Reliability Improvements) - Miles	27	39	45	49
Company Owned Services	2,500	3,000	3,200	3,150
Meter Replacement	4,000	4,700	5,900	6,300
M&R Station Upgrades/Improvements	10	13	13	13

AMENDED SECOND REVISED
Long-Term Infrastructure Improvement Plan
January 1, 2015 through December 31, 2019

Amended Second Revised Appendix 4

Projected Annual LTIP Expenditures

Peoples Division

Type (in millions \$)	2015	Applicable FERC Account No.			
Distribution Lines	\$21.8	376			
Company Owned Services	9.5	380			
Gathering Lines	0.7	332			
Storage Lines	0.0	353			
Transmission Lines	2.9	367			
Pipeline Integrity	0.0	Included in functional pipeline account			
Government Relocations	3.1	Included in functional pipeline account			
Meter Replacement	2.7	381 & 382			
Other Related Capitalized Costs					
Bar Coding/Mapping Tech.	0.0	303			
Smart Meter Technology	0.0				
Fleet	1.6				
M&R Station Upgrades / Improvements	1.0				
Grand Total	\$43.3				
Type (in millions \$)	2016	2017	2018	2019	5 year Avg.
Pipeline Replacement	\$30.1	\$36.3	\$43.0	\$43.4	\$36.3
Company Owned Services	10.2	11.2	13.0	13.4	11.5
Pipeline Integrity	0.0	0.0	0.0	0.0	0.0
Government Relocations	2.1	2.5	2.7	2.9	2.7
Meter Replacement	3.4	3.3	3.6	3.6	3.3
Total	\$45.8	\$53.3	\$62.3	\$63.3	\$53.7
Other Related Capitalized Costs					
Bar Coding/Mapping Tech.	0.0	0.0	0.0	0.0	0.0
Smart Meter Technology	5.1	7.0	7.0	7.0	5.2
Tools	0.4	0.2	0.0	0.0	0.1
Fleet	4.2	1.2	0.0	0.0	1.4
M&R Station Upgrades/Improvements	1.3	1.8	1.5	1.5	1.4
Grand Total	\$56.8	\$63.5	\$70.8	\$71.8	\$61.2

AMENDED SECOND REVISED
Long-Term Infrastructure Improvement Plan
January 1, 2015 through December 31, 2019

Amended Second Revised Appendix 4

Projected Annual LTIP Expenditures

Peoples-Equitable Division

Type (in millions \$)	2015	Applicable FERC Account No.			
Distribution Lines	\$28.5	376			
Company Owned Services	8.9	380			
Gathering Lines	0.3	332			
Storage Lines	0.0	353			
Transmission Lines	0.1	367			
Pipeline Integrity	0.0	Included in functional pipeline account			
Government Relocations	2.5	Included in functional pipeline account			
Meter Replacement	1.8	381 & 382			
Other Related Capitalized Costs					
Bar Coding/Mapping Tech.	0.0	303			
Smart Meter Technology	0.0				
Fleet	1.7				
M&R Station Upgrades/Improvements	0.3				
Grand Total	\$44.1				
Type (in millions \$)	2016	2017	2018	2019	5 year Avg.
Pipeline Replacement	\$31.6	\$47.6	\$54.0	\$59.0	\$44.7
Company Owned Services	9.8	11.8	12.5	13.4	11.3
Pipeline Integrity	0.0	0.0	0.0	0.0	0.0
Government Relocations	1.2	1.4	1.6	1.6	1.7
Meter Replacement	1.1	2.1	2.1	2.1	1.8
Total	\$43.7	\$62.9	\$70.2	\$76.1	\$59.5
Other Related Capitalized Costs					
Bar Coding/Mapping Tech.	0.0	0.0	0.0	0.0	0.0
Smart Meter Technology	0.0	0.0	0.0	0.0	0.0
Tools	0.4	0.3	0.0	0.0	0.1
Fleet	4.3	1.3	0.0	0.0	1.5
M&R Station Upgrades/Improvements	0.8	1.0	1.0	1.0	0.8
Grand Total	\$49.2	\$65.5	\$71.2	\$77.1	\$61.4

MARKED-UP VERSION

Peoples Natural Gas Company LLC
Amended Second Revised LTIIP

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INTRODUCTION

This document is the Amended Second Revised Long-Term Infrastructure Improvement Plan ("LTiIP") of Peoples Natural Gas Company LLC ("Peoples") for its Peoples Division and Equitable Division for the Period January 1, 2015 through December 31, 2019 ("Amended Second Revised LTiIP"). This Amended Second Revised LTiIP replaces the currently-approved, combined revised LTiIP ("Revised LTiIP") of the Peoples Division and the Equitable Division (formerly Equitable Gas Company) that was approved by Commission order entered on December 18, 2014 at Docket Nos. P-2013-2344596 and P-2013-2342745.

Prior to the merger of Equitable Gas Company into Peoples in December, 2013, both companies had proposed and received Commission approval of LTiIPs to guide the repair and replacement of aging infrastructure. In the approved merger settlement,¹ Peoples agreed to increase its capital spending levels by committing to an average of \$80 million in LTiIP capital expenditures per year for the Peoples Division for the years 2015 – 2019 and an average of \$33 million per year for the Equitable Division for the years 2015 – 2016 and an average of \$45 million per year for the Equitable Division for the years 2017 – 2019. On June 18, 2014, Peoples filed the Revised LTiIP for the combined operations of the Peoples Division and the Equitable Division. Peoples exceeded the average annual spending requirements from the merger settlement with Peoples' Revised LTiIP, which reflects an average capital investment for infrastructure improvements of \$123 million per year for the five year period from January 1, 2015 through December 31, 2019. By order entered on December 18, 2014, the Commission approved the Petition for approval of the combined Revised LTiIP for both the Peoples Division and the Equitable Division.

¹ On November 14, 2013, the Commission approved a Joint Petition for Settlement of all issues in the acquisition and merger of Equitable Gas Company at Docket Nos. A-2013-2353647, A-2015-2353649, and A-2013-2353651.

As described in more detail herein, Peoples is not proposing any changes to the combined annual spending levels for the Peoples and Equitable Divisions during the term of the approved Revised LTIP, but instead now proposes ~~six~~five changes to how Peoples will deploy the approved capital spending to improve its infrastructure. The ~~six~~five areas where Peoples is proposing to modify the Revised LTIP are: Peoples proposes to defer implementation of pipeline bar coding information technology; Peoples proposes to build an in-house construction division to perform pipeline replacement functions; Peoples proposes to replace all 'at-risk' customer owned service lines within the scope of its LTIP projects consistent with the Commission's Order at P-2013-2344596 and P-2013-2342745 beginning in 2016; Peoples proposes to focus its replacement program on pipelines in urban areas through December 31, 2019; Peoples proposes to implement a special meter technology program in 2016; and Peoples proposes to include a new LTIP category for the replacement and investment in measuring and regulating ("M&R") infrastructure to further enhance service reliability. Each of these five areas is detailed in the sections below. Also, since these changes will impact different elements of the current LTIP, the last section of the Amended Second Revised LTIP will describe how each of the required seven components of the LTIP will be impacted by the proposed modifications.

DEFERRAL OF BAR CODING INFORMATION TECHNOLOGY

The currently effective LTIP for the Peoples Division and the Equitable Division includes an approved LTIP category for pipeline bar coding information technology. This technology would enable the Company to track critical information on pipelines and related equipment and includes investment in barcoding hardware, software, and reading devices and the investment in barcodes affixed to DSIC-eligible plant.

The Peoples Division and the Equitable Division have not initiated this project and are not planning to do so at this time as a result of uncertainty created by a proposed rulemaking issued in May 2015 by the Department of Transportation's Pipeline and Hazardous Materials Safety Administration concerning regulatory requirements involving plastic piping systems used in gas services. Among other things, this rulemaking addresses possible changes regarding the traceability and tracking of plastic pipelines. The Company believes that it is prudent to defer implementation of pipeline bar coding information technology until such future time when the details, requirements, and timing regarding final regulations are known. As a result, the data provided within this Amended Second Revised LTIP no longer shows any planned expenditures for bar coding technology during the five-year LTIP period. The existing LTIP bar coding related expenditures of \$3.0 million (\$1.0 million per year for 2015 -2017) for the Peoples Division and \$3.0 million (\$1.0 million per year for 2015 -2017) for the Equitable Division will now be used for some of the expenditures for two new Amended Second Revised LTIP categories – special meter technology and M&R station upgrades.

CONSTRUCTION DIVISION

In recent years, about 20% of capital related construction work at Peoples, which includes design, planning and construction, was performed by our in-house employees and crews. Approximately 80% of this work was performed by outside independent contractors. Within the Equitable Division an even greater percentage of such capital construction work was performed by outside independent contractors. Historically, all restoration capital work for both Divisions was performed by contractors. Recently, the Company reexamined these historical practices and developed a plan to revamp the construction process by establishing a Construction Division that would perform 100% of capital related construction work at Peoples, the Equitable Division, and its sister company – Peoples TWP with in-house employees and construction crews. The Construction Division's scope of work will include design, planning, construction, and restoration. The move to an in-house staffed Construction Division will further improve the quality of capital work by reducing the cycle time of "planning to restoration", and improving the efficiency and operating costs of all construction activities.

The transition to a full Construction Division is expected to be a two year process that will continue through 2016. By the end of 2016, the Construction Division will be staffed with superintendents, managers, supervisors, technicians, and engineers as well as approximately 300 field employees that will be located throughout our service territories to handle all construction and restoration work. Approximately 220 of these field employees (including field inspectors) will be assigned to forty-five (45) construction crews, and the remaining field employees (approximately 80) will be responsible for restoration work.

To address the seasonal nature of construction work in our service territory, about 60% or 180 of the total field jobs will be staffed with “seasonal” employees who would be required to work only during the construction season months of March through December of each year. For employee benefits purposes, these seasonal employees will be considered full time employees even though they will work only ten months per year. Their pay for ten months of work will be paid over twelve months.

While the Construction Division employees will be dedicated to performing capital work, they will be made available, on a limited basis, to support O&M work activities such as emergencies and overtime call outs in order to ensure that all operations activities are done in the most cost efficient manner. Should this occur, their time would be properly tracked and charged as an O&M expense.

The Company is establishing the in-house Construction Division in order to provide the optimal level of service for our customers over the 20-year period when the Company plans to replace its entire bare steel pipe. Some of the customer benefits expected from the establishment of the Construction Division are outlined below:

- Improved quality of service and reduced construction times:
 - Develop, and better enforce, all construction performance metrics as an in-house service
 - Enhance partnering with local and regional government agencies and other utilities to improve coordination of various projects
 - Better coordination of all construction phases will reduce time between planning, design, construction, and permanent restoration

- The Company has recently partnered with a proven high quality restoration company on a transitional basis to assist with initial restoration work and provide training/oversight of Peoples Companies' new restoration employees
- Better ensure that technical skills and operator qualification training is performed and updated; avoid challenges of ensuring contractor compliance with skills/OQ training requirements
- Improved Cost Efficiencies:
 - The Peoples' Companies as well as other natural gas distribution companies in our region have begun and will continue to pursue accelerated pipeline replacement programs. Also, abundant Marcellus shale production, which is located throughout Peoples' service territory, has spurred new pipeline construction that is expected to increase over the next few years as more pipeline projects are built to ship natural gas out of our region. These initiatives have and will continue to increase the demand for pipeline contractors to perform work on the development and replacement of pipeline infrastructure. The increased demand for trained and capable pipeline contractors has increased the cost for such services and is expected to continue to increase in the coming years. Bringing this work in-house will provide insulation from this supply/demand driven cost escalation and help to control the labor costs for construction related work.

In order to outfit the newly formed construction crews, the Company will need to purchase various vehicles and miscellaneous tools/equipment including: gang trucks with compressors, trailers, backhoes, mini-excavators, dump trucks, pick-up trucks, fusion machines, pipe squeeze units, and

miscellaneous tools such as concrete saws and tamping machines. Also required are some larger items such as tri-axle tandem dump trucks, skid loaders, pipe trailers, and larger scale excavators. The company has begun purchasing these items in 2015 and expects the bulk of these purchases to occur in 2016. A breakdown of the vehicle/equipment expenditures in support of each Division are set forth in the **Second Revised Appendix 4**.

By order entered May 23, 2013 at Docket No. P-2013-2344596, Peoples received Commission approval for inclusion of Vehicles, Tools and Equipment in its initial LTIP. Due to the significantly increased scale of such purchases required to equip and set up the in-house Construction Division and the role the Construction Division will play in accelerating infrastructure improvement and controlling future cost escalation, the Company is now requesting approval to include these upfront expenditures as an approved LTIP expenditure category for years 2015 – 2017. However, the Company is not requesting at this time, nor planning to request in the future, to recover these upfront expenditures for the specific period from 2015 – 2017 through the DSIC mechanism at the time the expenditures are made. Rather, the ongoing costs for these items (i.e. depreciation) will be charged as a capital overhead cost to each individual construction project as they are used. The overhead capital costs associated with the use of these vehicles and equipment (depreciation, maintenance, and fuel) will qualify as DSIC recovery items only as they are used in support of and charged to future DSIC related projects through a clearing account process.

REPLACEMENT OF CUSTOMER OWNED SERVICE LINES WITHIN LTIP **MAINLINE PROJECTS**

The current Revised LTIP of the Peoples Division and the Equitable Division included costs related to the replacement of customer owned service lines that fail a pressure test required for restoration of service after Peoples has repaired or replaced its company-owned service line. The cost of the customer owned service line replacements would be included with cost of the replaced mainline. The Commission's Order dealing with the review of the originally filed Second Revised LTIP at Docket P-2013-2344596 and P-2013-2342745 directed Peoples to file a new or revised LTIP that includes a provision for the replacement of all at-risk (bare steel, copper, cast-iron, or otherwise at-risk) customer owned service lines on a going forward basis for the mainline replacement projects outlined in the LTIP. Consistent with the Commission's Order, Peoples has included the cost of replacing all at-risk customer owned service lines within the scope of the LTIP projects from 2016 through the remainder of this LTIP period.

PIPELINE REPLACEMENT STRATEGY – SHIFT TO URBAN FOCUS

The current Revised LTIP of the Peoples Division and the Equitable Division was filed shortly (six months) after the closing of the transaction that merged Equitable with Peoples. During that period of time the Company was able to conduct preliminary evaluations of the priority of infrastructure replacement for both divisions with a goal of replacing the highest risk pipelines first, without regard to the Division in which the pipeline is located. Based on these preliminary evaluations Peoples presented, in the June 2014 Revised LTIP, its pipeline replacement spending plans for the separate Peoples and Equitable Divisions. Because the Company had planned to undertake further ongoing and more in-depth pipeline replacement evaluations of both divisions following the submission of the June 2014 Revised LTIP, it sought and received Commission approval² of a provision designed to provide the Company with flexibility to better address system-wide risk across Divisions. The approved provision allows Peoples to apply the annual Division specific capital commitments on a combined basis provided that Peoples achieves the required minimum annual investments for the Equitable Division as specified in the merger settlement. More recent evaluations conducted by the Company carefully reviewed the pipeline systems of both Divisions. These evaluations measured risk by evaluating the threat and consequence of failure of pipelines and considered both population and the density of mains and service lines as factors. The results of these more recent evaluations showed that by focusing pipeline replacement in the areas of high population density with overlapping pipelines, system-wide risk can be mitigated more quickly and in the most cost effective manner.

² Commission Order entered December 18, 2014 at Docket Nos. P-2013-2344596 and P-2013-2342745.

Peoples is now presenting a modification to its Revised LTIP that reflects the recent evaluations and a shift of the planned spending to the Equitable Division to more effectively target pipeline replacements for higher risk projects located in the urban and higher population areas of the system. This modified approach will not eliminate infrastructure replacement work in non-urban areas during the period of this LTIP but will result in a more concentrated focus in the urban, duplicative pipeline areas. Along with risk reduction, the urban focus will minimize the impacts on municipalities in the pipeline replacement areas by, among other things, shortening the period of disruption due to pipeline replacement for a large number of our customers. Under the revised urban focus plan, the Company would complete bare steel pipeline replacement in the City of Pittsburgh within 5-7 years and replace or remove from service by the end of 2015 all six miles of small diameter cast iron pipeline in place on the Equitable Division system at the time of acquisition.

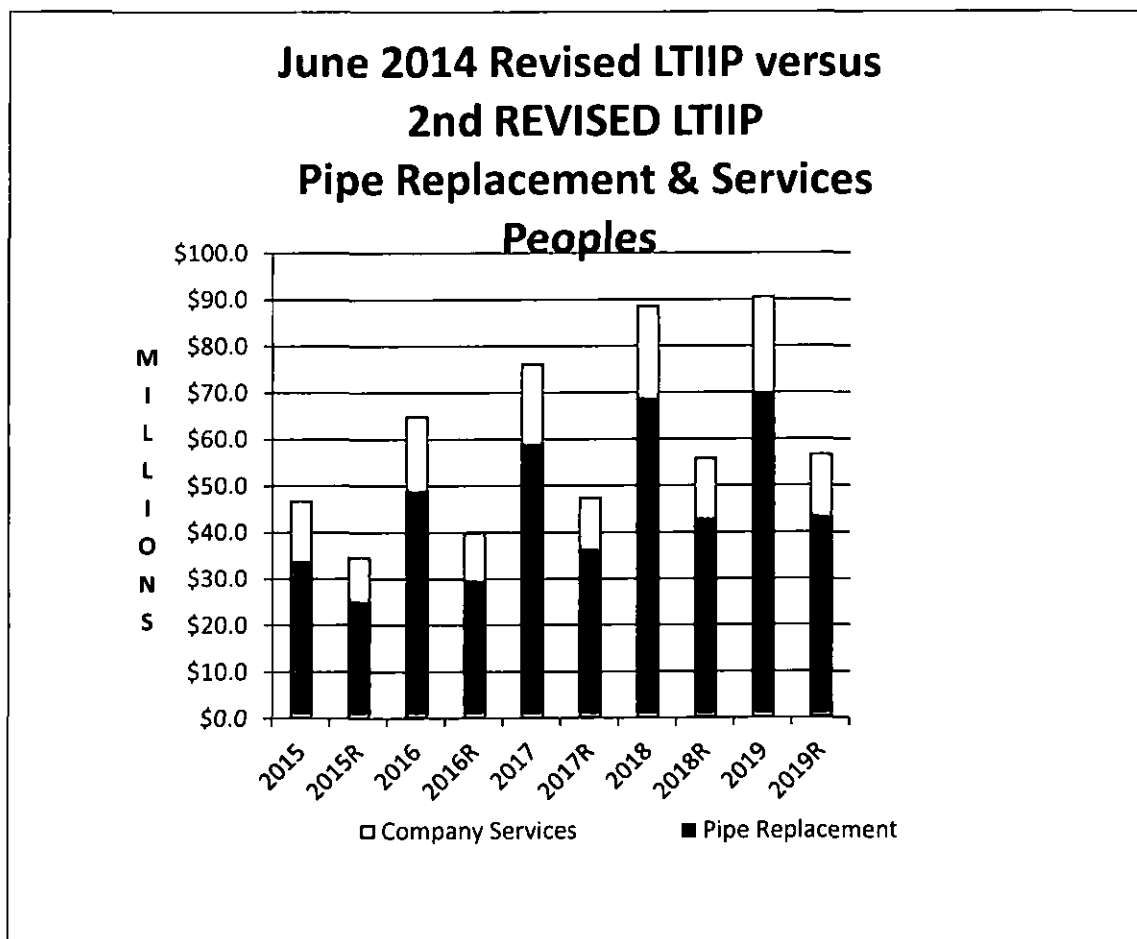
Even with the urban focus however, the operating characteristics and significant cost associated with the replacement of the existing thirty-one miles of Equitable Division large diameter pipeline (16 inch or larger) still require a measured, longer-term replacement approach. The Company plans to remove the larger diameter cast iron pipelines over a fifteen year period. This longer term replacement period for larger diameter cast iron pipelines will enable the Company to undertake a carefully phased and sequential replacement plan that will utilize pressure reinforcing interconnections between the Divisions with a proposed high pressure loop/belt system around the City of Pittsburgh that will allow for downsizing or elimination of mainline segments.

During the five year term of the Amended Second Revised LTIP, the majority of the refocused pipeline replacement work will occur in the more densely populated areas in the City of Pittsburgh and surrounding Allegheny County where much of this area is served by the Equitable Division pipeline

system. The impact of focusing more pipeline replacement work in the urban areas of our system results in a higher cost per foot of pipeline to be replaced. These cost increases are due to, among other things, tight space work areas, which decreases efficiency, significant traffic control issues, excavating through multiple hard surface layers, and significantly more extensive restoration work on both the streets where the mains are located as well as on the customer's property. The higher cost per foot to install pipelines in the urban areas, along with the costs of replacing all at-risk customer owned service lines, will reduce the total footage of pipelines to be replaced from the projected number of miles of replaced pipelines that is set forth in the currently approved Revised LTIIP. The projected footage to be replaced over the Amended Second Revised LTIIP period (2015 – 2019) under the proposed urban focus plan is ~~446~~394 miles as compared to the currently approved revised LTIIP replacements of 594 miles, a ~~25~~33% reduction.

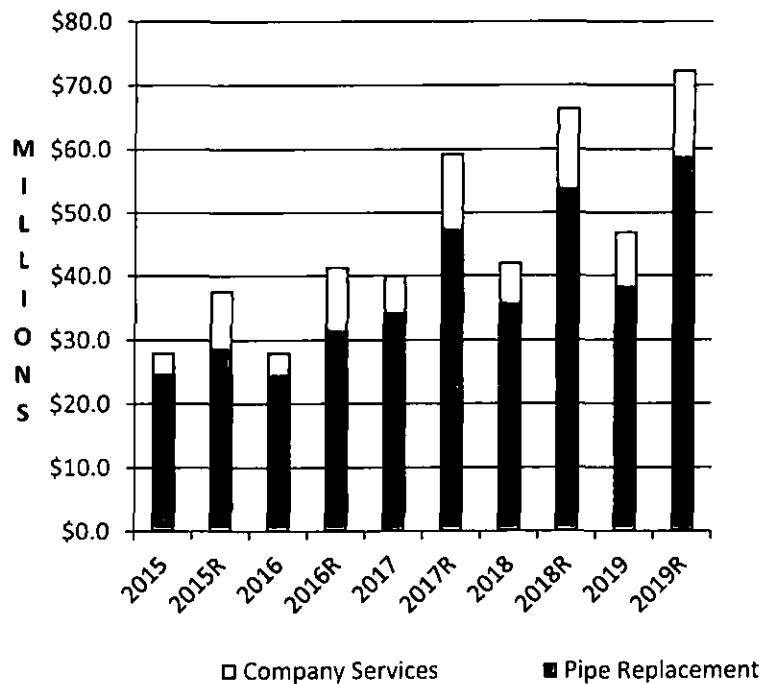
However, this focus should also help to maximize the amount of pipelines that can be abandoned and not replaced during the term of the LTIIP through the ability to interconnect the pipeline systems of both divisions. As a result of the urban focus the Company has found additional efficiencies to be captured and currently projects that a total of 23 miles of urban pipeline can be abandoned without replacement over the 2016 - 2019 period. Factoring in the miles of these avoided pipelines with the miles of pipeline to be replaced under the Amended Second Revised LTIIP, when compared to the June 2014 Revised LTIIP, the net mileage reduction is reduced from 33~~25~~% to 30~~21~~%. Moreover, the reduction in miles of pipeline replaced is temporary and will be more than offset by an increase in the miles of pipeline to be replaced annually during future periods when a higher proportion of pipeline replacements will be in non-urban areas where the cost per mile of replacement is considerably lower. A similar reduction is not expected to be seen in the number of company–

owned services that will be replaced under the Amended Second Revised LTIIP. In fact, the number of services *per mile of pipeline* to be replaced under this Amended Second Revised LTIIP will increase due to the increased density of customer premises. Below are separate graphs for the Peoples Division and Equitable Division showing the shift in capital spending on pipeline replacements and company-owned service lines from the Peoples Division to the Equitable Division as a result of the revised pipeline replacement strategy³. The year by year spending as well as annual statistical information showing the impacts of the can be found in updated **Second Revised Appendix 4**.



³ By Order entered on December 18, 2014 in the Petition of Peoples Natural Gas Company LLC and Peoples TWP LLC for accounting and regulatory approvals and approval of related tariff revisions associated with implementation of Revised Long Term Infrastructure Plan - Docket No. P-2014-2429346, the Commission requires Peoples to provide notification if in a calendar year the capital spending under the LTIIP varies by more than 5% between the Peoples/Equitable Divisions. Peoples expects to provide this annual notice during the term of the Second Revised LTIIP as a result of the planned shift in spending to the Equitable Division.

June 2014 Revised LTIIP versus 2nd REVISED LTIIP Pipe Replacement & Services Equitable Division



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AUTOMATED METER READING

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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.

Peoples' original LTIP filed at Docket No. P-2013-2344596 included special meter technology as an area of "special consideration". Peoples explained that the special meter technology would likely involve an AMR technology such as Encoder Receiver Transmitters ("ERTs"), but at that time Peoples had no specific, proposed meter technology program to list in its LTIP, and Peoples intended to present a future claim to recover AMR technology costs when the Company begins installation of AMR technology. The Company further explained that during the initial years of the LTIP it planned to study the deployment of AMR technology. Peoples received Commission approval of its LTIP and the inclusion of this meter technology in the LTIP by Order entered May 23, 2013.

Peoples has undertaken further evaluation and review of the special meter technology and is now proposing to revise its approved LTIP to incorporate the installation of AMR technology. The Company is proposing a five-year program that will run from 2016 through 2020 through which it would retro-fit ERTs, using the latest technology, on all Peoples Division residential and commercial customer meters. ERTs use a packet radio protocol that will transmit data from customer meters to

Company drive-by vehicles in order to collect metered usage data without a worker physically reading each meter. Under the proposed program, ERT's would only be placed on Peoples Division customer meters and not on the meters of Equitable Division customers. Equitable Division customer meters have AMR/ERT equipment already installed. The estimated total cost of the five-year program is estimated to be \$33.0 million and consists of costs for: data logging modules on 375,000 meters, hardware such as Mobile Collectors Units and accessories, software, planning, testing, and labor for ERT mounting and installation. Peoples' first year costs (2016) are estimated to be \$5.1 million and will consist of upfront project planning and hardware and software costs of \$2.2 million, along with \$2.9 million for the ERT units and installation on an estimated 33,000 meters. The annual costs for the last four years of the plan (2017-2020) are estimated to be \$7.0 million which include ERT units and installation on the remaining customer meters. The initial rollout will utilize drive by technology and the accelerated installation of ERTs on the Peoples Division system will be strategically installed by location so that Peoples Division and Equitable Division routes can be managed in the most efficient manner. Also as part of this plan, as new meters are installed through the normal meter change process, ERTs will be installed on the replacement meters and those replacement meters will be added to drive-by-routes as soon as practicable. The Company intends to further evaluate the installation of a fixed network system in concentrated areas that would permit the real-time automated collection of meter data using wireless communications in the future.

The Company plans to redirect dollars from two areas to cover the costs related to the installation of AMR technology. First, as described previously in this Amended Second Revised LTIIP, the Company is not planning to initiate its bar coding technology initiative for the Peoples Division and the Equitable Division during the term of the Amended Second Revised LTIIP. Peoples proposes that

the total bar coding related expenditures of \$6.0 million as set forth in the current Revised LTIP (\$3.0 million for the Peoples Division and \$3.0 million for the Equitable Division) instead be used for AMR (as well as M&R station upgrades - a new LTIP category discussed later). Second, the Company plans to use the capital cost savings generated from reductions to our pipeline replacement capital costs that were not recognized in the current approved Revised LTIP. The means for generating these costs saving were made possible by the recent Commission approvals granted in the Peoples and Peoples Equitable Division's 1307(f)-2015 proceedings at Docket Nos. R-2015-2465172 and R-2015-2465181 to merge the purchased gas cost ("PGC") rates of its two Divisions, so that beginning October 1, 2015, both Divisions would charge the same PGC rates to their customers. An important aspect of this approval is that with the merger of gas costs rates the Company will no longer be required to meter and track the physical flow of volumes delivered between the two Divisions. Prior to this change, the ability to physically interconnect the pipeline systems of both divisions was significantly limited due to the cost of measurement facilities and the inability to place measurement facilities in urban areas where most of the systems interconnect. The merging of gas cost rates, among other identified benefits, now avoids the need for measurement and will allow for the construction of many more physical interconnections between Divisions. This will enhance the operational reliability and efficiency of the systems and importantly free up additional capital by avoiding the renewal of duplicative pipelines of both Divisions ("synergy savings"). The Company now proposes in this Amended Second Revised LTIP to help finance the AMR Program (as well as M&R station upgrades) with these synergy savings without causing reductions in the miles of at risk pipelines that were intended to be removed from the systems in the current LTIP. Earlier this year the Company more closely analyzed the systems to identify those previously unavailable opportunities to interconnect the

pipeline systems in the overlapping urban areas. This analysis looked at the areas of planned pipeline replacement and initially identified approximately 23 miles of duplicative pipelines that now will no longer need to be replaced over the LTIP period from 2016 through 2019. Further ongoing analyses are expected to identify additional synergy opportunities. At an assumed urban area pipeline replacement cost of \$1.2 to \$1.5 million per mile, the initially identified 23 miles of avoided pipeline replacements could generate synergy savings from \$28 to \$35 million.

While Peoples already has Commission approval to include AMR technology as an LTIP category for the Peoples Division, it received Commission approval⁴ to withdraw its proposal to recover AMR related costs through the DSIC mechanism with the right to present a future claim to include AMR technology costs at such time when the Company actually installs AMR support technology. The Company recognizes that such a claim would need to be made through a separate petition that requests modification of its existing DSIC recovery mechanism. The Company is not submitting such a petition at this time but reserves the right to do so in the future.

There are numerous customer benefits associated with the installation of AMR technology.

They include:

- Enhanced customer convenience – natural gas meter reads are transmitted automatically without a need for a technician to access meters. This is especially convenient for customers with meters located inside a home or business that not only have to deal with meter technician access, but also have to read their meters and provide the results to the Company when their indoor meter has been inaccessible for

⁴ Commission Order entered August 21, 2014 at Docket No. P-2013-2344596.

any reason. These customers will no longer need to take time out of their busy days to accommodate Peoples;

- Improved billing practices – with ERTs, customer billing is based on actual natural gas usage, not an estimate based on past consumption. Customers no longer are subject to the fluctuations that can result from estimated billing, and this will improve the customer experience, reduce the number of high bill issues and eliminate estimated bill complaints. Estimated bills will be virtually eliminated and any human error associated with manual meter readings will be eliminated;
- Non-registering meters would be identified and corrected quickly;
- Improve Retail Market Participation – Through access to ongoing actual monthly customer usage data, natural gas suppliers will be better able to manage natural gas supplies for their customers through improved usage targets which in turn will reduce the level of imbalance charges that ultimately are borne by shopping customers;
- Unaccounted For Gas (“UFG”) - Actual meter readings (i.e., elimination of estimated meter readings) will allow the Company to more accurately quantify UFG and identify root causes;
- Theft of Service would be much easier to detect and correct;
- Manages Operating Costs – AMR will reduce meter reading costs through the elimination of manual readings or usage verification; and
- Provides data to be used in incident investigation which provides the opportunity for quick identification or elimination of possible root causes.

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M&R STATIONS

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. The Peoples Division has 1,376 M&R stations strategically located on the system. There are 662 M&R stations on the Equitable Division system.

During the five-year term of the Amended Second Revised LTIP, Peoples is planning to undertake various upgrades and improvements to the M&R stations and related M&R equipment located on both the Peoples Division and Equitable Division to ensure safe and continued reliable gas service to our customers. These upgrades and improvements may involve the replacement of the stations or the equipment at the station because of a number of factors that include: age, obsolescence, malfunctions, resizing, system operating pressure changes, performance and reliability issues, and relocation. During the five-year term of the Amended Second Revised LTIP, the Company is planning upgrades and improvements to approximately 40 M&R stations per year or 200 M&R stations in total. During the five-year term of the Amended Second Revised LTIP the Company plans to spend \$7.1 million (or \$1.4 million/year) for M&R station upgrades/improvements on the Peoples Division and \$4.1 million (or \$0.8 million/year) for M&R station upgrades/improvements on the Equitable Division.

The Company now plans to redirect a portion of LTIP dollars originally intended for bar coding technology (\$6.0 million in avoided costs) and expected capital cost “synergy savings” (\$28 to \$35

million) toward the installation of M&R station upgrades. Over the five-year term of the Amended Second Revised LTIP, these redirected costs and synergy savings will be used to cover the estimated costs of M&R station upgrades (\$11.2 million) and the AMR program (\$26.2 million).

The planned improvements to these existing M&R stations are necessary in order to maintain safe, adequate, reliable and low cost service for Peoples' customers. Accordingly, the Company proposes to include M&R station improvements as a new component of the LTIP for both the Peoples and Equitable divisions. The Company recognizes that in order to recover the costs for this new category through the DSIC mechanism, a separate petition is required. The Company is not submitting such a petition at this time but reserves the right to do so in the future.

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COMPONENTS OF THE LONG-TERM INFRASTRUCTURE IMPROVEMENT PLAN

Act 11 prescribed certain informational components for inclusion in the LTIP. There are six required specific components as well as a seventh component related to worker qualification, as required by the Commission in its Final Implementation Order. For purposes of this Amended Second Revised LTIP, the impact upon these seven LTIP components, as a result of the changes described previously herein, are set forth and described below. A complete copy of the approved and currently effective Revised LTIP of the Peoples Division and Equitable Division is attached as Amended Second Revised LTIP Attachment 1 for comparison purposes.

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

The types and age of eligible pipeline property for which Peoples will seek DSIC recovery remains unchanged as a result of the proposed changes set forth within this Amended Second Revised LTIP. With regard to pipeline replacement, the Company is not currently changing its plan to replace all target pipe, predominantly unprotected bare steel and cast iron pipelines, over an approximate twenty year period. However, as described earlier, the Peoples' replacement program will now focus on more pipeline replacements of the highest risk pipe located in urban areas during the term of this LTIP. While this will result in less miles of pipelines being replaced than projected in the June 2014 Revised LTIP for the period from 2015 – 2019, primarily as a result of replacing lines in higher cost areas and including the replacement of all at-risk customer owned service lines, it will more effectively reduce system-wide risk. Conversely, in the years following 2019, the total miles of pipelines to be replaced will increase as at-risk pipelines are replaced in the less-urban areas. This revised focus is consistent with

the main objective of reducing system risk and maintaining system integrity, reliability and safety. The refocusing of the LTIP to urban areas will maximize the reduction in system wide risk and maximize cost saving opportunities in areas with duplicative pipe. In light of the additional customer service line replacements included in this Amended Second Revised LTIP, the Company will revisit the timeframe for total replacement of all at-risk infrastructure and may elect to extend the replacement term at the filing of the next 5 year segment of its LTIP. The next two years will provide Peoples valuable experience with replacing all at-risk customer service lines and determine the full impact of this change on the replacement timeframe.

Regarding meter replacements, Peoples is not proposing to change the rate of annual meter replacements that is set forth in the Revised LTIP. Such changes will continue to be based on meter testing results based on a statistical sampling method that is described within the June 2014 Revised LTIP. As described earlier in the ~~Second Revised LTIP~~ Amended Second Revised LTIP, Peoples is proposing to adopt a five year AMR program that will install ERT units on all Peoples Division meters.

The Company is proposing to include Distribution and Transmission M&R Stations as a new category for inclusion in the LTIP. The Peoples and Equitable Divisions currently operate 2,038 distribution and transmission M&R stations located throughout its systems. Of these, 1,376 are located on the Peoples Division system and 662 are located on the Equitable Division system. Over the five year period of the ~~Second Revised LTIP~~ Amended Second Revised LTIP, the Company projects that about 200 of these existing M&R stations will require upgrades or improvements to ensure continued safe, adequate and reliable service.

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

Second Revised Appendix 2-A contains a schedule showing the strategies employed for the planned repair and replacement of DSIC-eligible plant during the 5-year period covered by the ~~Second Revised LTIIP~~ Amended Second Revised LTIIP. **Second Revised Appendix 2-A** is based on an analysis of equipment failures, their nature, causes, locations, analysis of reliability performance indicators, and forecasts of future reliability concerns. Revisions to this schedule, as a result of the modifications discussed within the ~~Second Revised LTIIP~~ Amended Second Revised LTIIP, are shown in redline form for easy reference.

3. Location of eligible property.

The revisions proposed in this revised LTIIP to include AMR, shift the pipeline replacement focus to urban areas and to bring construction in-house will not result in any changes to the location of eligible property as originally considered in the June 2014 Revised LTIIP. In this ~~Second Revised LTIIP~~ Amended Second Revised LTIIP, Peoples is now proposing that upgrades and improvements to existing M&R stations located on the Peoples and Equitable Division system be included as a new LTIIP category. The locations of the approximate 200 M&R stations that are planned for upgrades and improvements over the course of the 2015 – 2019 LTIIP period are fairly equally dispersed across the systems of the Peoples and Equitable Divisions.

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

Second Revised Appendix 3 shows the estimated quantity of property to be improved during each of the five years covered by this revised LTIIP.

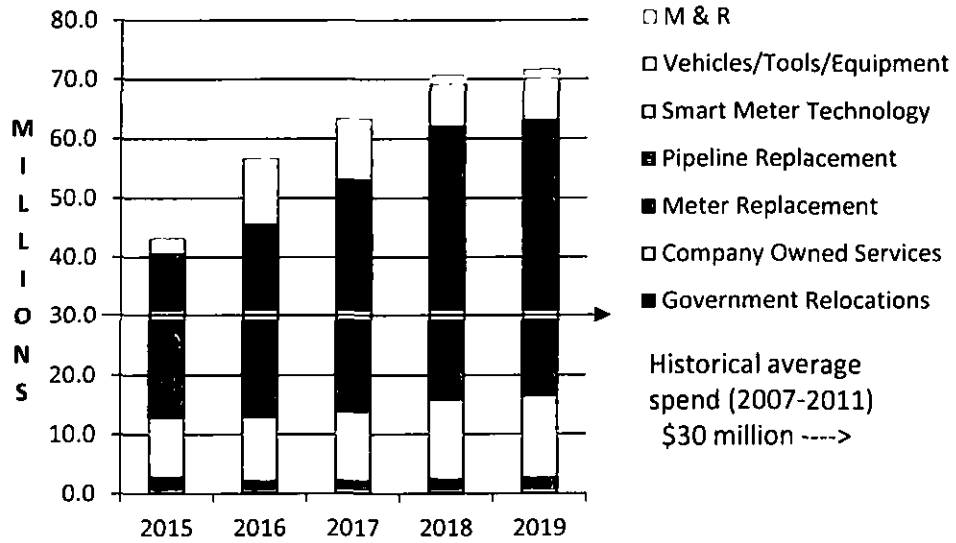
5. Projected annual expenditures to implement the LTIIIP and measures to ensure its cost effectiveness.

Peoples' projected annual expenditures during the term of the LTIIIP for DSIC eligible replacements are shown in the table contained in **Second Revised Appendix 4**. Information on the measures to ensure the LTIIIP's cost effectiveness is set forth in this same section of the June 2014 Revised LTIIIP. In addition to these existing measures and as described previously in the ~~Second Revised LTIIIP~~ Amended Second Revised LTIIIP, the Company is proposing to establish an in-house Construction Division to further improve the quality of capital work, reduce the cycle time of "planning to restoration", and improve the efficiency and operating costs of all construction activities.

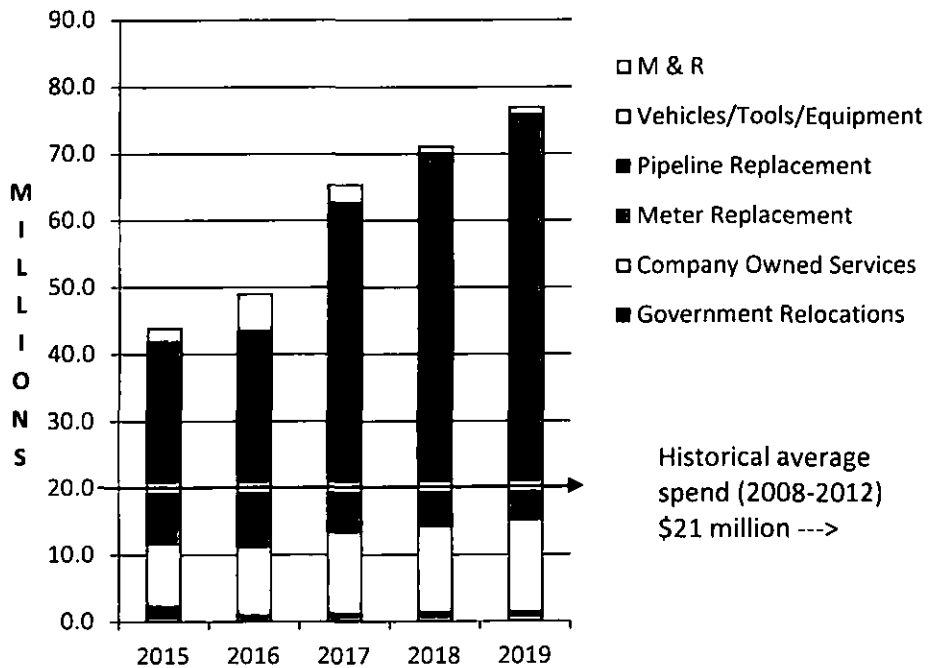
6. Manner in which replacement of aging infrastructure will be accelerated and how repair, improvement or replacement will maintain adequate, efficient, safe, reliable and reasonable service.

Peoples' accelerated infrastructure replacement program began in mid-2011 with the replacement of all cast iron pipelines and continues today under the currently approved LTIIIP. Peoples' continued commitment to remove aging infrastructure at the Peoples and Equitable Divisions and making improvements to maintain adequate, efficient, safe, reliable and reasonable service is set forth throughout this ~~Second Revised LTIIIP~~ Amended Second Revised LTIIIP. The expected acceleration of the replacement of the Company's aging infrastructure and additions for improvement as proposed within this Amended Second Revised LTIIIP are illustrated in the following graphs.

2nd REVISED LTIIP Projected Expenditures Peoples Division



2nd REVISED LTIIP Projected Expenditures Equitable Division



The repair, improvement or replacement of facilities identified in this revised LTIP will maintain adequate, efficient, safe, reliable and reasonable service across both Divisions. Historically, pipeline replacement was driven by short term operational and/or economic factors. The Company is pursuing a long term strategy for pipeline replacements that is based on increasing the safety and reliability of the system, refocusing in the short term to urban areas, while also pursuing projects that have long term benefits to system operations and reduce maintenance costs such as leak survey costs. If the Company encounters other high risk pipe during one of its planned replacement projects, it typically replaces this pipe in order to gain efficiency and further increase the safety of the system.

- 7. Plan to ensure that work to repair, improve, or replace eligible property is performed by qualified employees of the utility or independent contractor to protect system reliability and public safety.**

Information in response to this LTIP component as presented and approved in the June 2014 Revised LTIP are unchanged by this Amended Second Revised LTIP. ~~As detailed in this Second Revised LTIP,~~ Peoples is establishing a Construction Division that will eventually perform all construction activities in-house. This approach will help to ensure that technical skills and operator qualification training is performed and updated and will avoid the challenges of ensuring contractor compliance with skills/OQ training requirements.

SCHEDULE FOR PLANNED REPAIR AND REPLACEMENT**January 1, 2015 through December 31, 2019**

Plant Type	Replacement Strategy	Schedule
Standard Categories		
Distribution Lines (including company owned service renewals)	Replace Target Pipe within the 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 <i>population density and the density of pipelines</i> eligible for replacement.	20 years – <u>Schedule may be extended as result of PUC Order that directs the company to replace at-risk customer services.</u>
Gathering Line Replacements	Replace all bare unprotected steel gathering lines based upon a risk ranking prioritization approach.	20 years – <u>Schedule may be extended as result of PUC Order that directs the company to replace at-risk customer services.</u>
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. These replacements are over and above the requirements of the DOT-mandated Transmission Pipeline Integrity Program, which only applies to High Consequence Areas.	As needed
Improvement to Facilitate Pipeline Integrity	As future in-line inspections (i.e., smart pig runs) and pipeline reassessments are conducted, segments of transmission and storage pipelines will be replaced as required by the Transmission	Ongoing

Plant Type	Replacement Strategy	Schedule
	Integrity Management Plan (TRIMP). Such segments that would be replaced would be as a result of anomalies or defects discovered from future in-line inspections. The segments targeted will be prioritized based upon bare steel segments, leak history, etc. over and above Pipeline Integrity.	
Government Relocations	Facility relocations will continue to be scheduled consistent with request from the governmental agency.	As needed
Meters (replacement)	Meters will be replaced according to a statistical sampling based methodology that involves meter type based risk assessments.	Ongoing
Special Considerations		
Customer service line replacements	Replace all at-risk customer service lines as Peoples has repaired or replaced its company-owned facilities.	<u>20 years - Schedule may be extended as result of PUC Order that directs the company to replace at-risk customer services. As encountered</u>
Special Meter Technology	The Company is undertaking a system-wide project that will result in the installation of automated meter reading technology on all customer meters on the Peoples Division system.	This project will begin in 2016 and continue through 2020.
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	As needed

Plant Type	Replacement Strategy	Schedule
	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 both Divisions in areas where there have been service (pressure) or supply issues and areas in which a critical single feed exists.	
M&R Station Stations 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, <i>resizing, performance, reliability,</i> pressures changes and relocations are issues.	As needed
Other Related Capitalized Costs		
Vehicles / Tools / Equipment	Purchase incremental tools and equipment specific to the projects in this LTIIP. The Company also plans to significantly increase its purchases of vehicles, tools and equipment over the 2015 – 2017 time frames in support of its Construction Division.	As needed, with increased purchases over the 2105 – 2017 period
Bar Coding/Mapping and Material Tracking Technology	The Company does not currently have bar coding and the supporting integrated systems. At this time the Company is not planning to undertake the purchase and installation of this technology during the term of this LTIIP but does plan to reevaluate the use of this technology in the future.	Not planned at this time

AMENDED SECOND REVISED
Long-Term Infrastructure Improvement Plan
January 1, 2015 through December 31, 2019

Amended Second Revised Appendix 3

Projected Quantity of Property Improved

Peoples Division

Category	2015			
Distribution Lines - Miles	33			
Company Owned Services - Count	2,700			
Gathering Lines - Miles	6			
Transmission/Storage Lines - Miles	3			
Meter Replacement	6,600			
Customer Owned Services - Count	300			
Smart Meter Technology	0			
M&R Station Upgrades/Improvements	33			
Category	2016	2017	2018	2019
Pipeline Replacement (Distribution, Transmission, Gathering, and Reliability Improvements) - Miles	34	39	46	46
Company Owned Services	4,650	5,360	5,600	5,400
Meter Replacement	4,200	5,000	5,900	6,100
M&R Station Upgrades/Improvements	35	48	27	27
Smart Meter Technology / ERTs	33,000	85,500	85,500	85,500

Equitable Division

Category	2015			
Distribution Lines - Miles	24			
Company Owned Services - Count	2,850			
Gathering Lines - Miles	2			
Transmission/Storage Lines - Miles	1			
Meter Replacement	4,100			
Customer Owned Services - Count	560			
Smart Meter Technology	0			
M&R Station Upgrades/Improvements	5			
Category	2016	2017	2018	2019
Pipeline Replacement (Distribution, Transmission, Gathering, and Reliability Improvements) - Miles	27	39	45	49
Company Owned Services	2,500	3,000	3,200	3,150
Meter Replacement	4,000	4,700	5,900	6,300
M&R Station Upgrades/Improvements	10	13	13	13

AMENDED SECOND REVISED
Long-Term Infrastructure Improvement Plan
January 1, 2015 through December 31, 2019

Amended Second Revised Appendix 4

Projected Annual LTIP Expenditures

Peoples Division

Type (in millions \$)	2015	Applicable FERC Account No.			
Distribution Lines	\$21.8	376			
Company Owned Services	9.5	380			
Gathering Lines	0.7	332			
Storage Lines	0.0	353			
Transmission Lines	2.9	367			
Pipeline Integrity	0.0	Included in functional pipeline account			
Government Relocations	3.1	Included in functional pipeline account			
Meter Replacement	2.7	381 & 382			
Other Related Capitalized Costs					
Bar Coding/Mapping Tech.	0.0	303			
Smart Meter Technology	0.0				
Fleet	1.6				
M&R Station Upgrades / Improvements	1.0				
Grand Total	\$43.3				
Type (in millions \$)	2016	2017	2018	2019	5 year Avg.
Pipeline Replacement	\$30.1	\$36.3	\$43.0	\$43.4	\$36.3
Company Owned Services	10.2	11.2	13.0	13.4	11.5
Pipeline Integrity	0.0	0.0	0.0	0.0	0.0
Government Relocations	2.1	2.5	2.7	2.9	2.7
Meter Replacement	3.4	3.3	3.6	3.6	3.3
Total	\$45.8	\$53.3	\$62.3	\$63.3	\$53.7
Other Related Capitalized Costs					
Bar Coding/Mapping Tech.	0.0	0.0	0.0	0.0	0.0
Smart Meter Technology	5.1	7.0	7.0	7.0	5.2
Tools	0.4	0.2	0.0	0.0	0.1
Fleet	4.2	1.2	0.0	0.0	1.4
M&R Station Upgrades/Improvements	1.3	1.8	1.5	1.5	1.4
Grand Total	\$56.8	\$63.5	\$70.8	\$71.8	\$61.2

AMENDED SECOND REVISED
Long-Term Infrastructure Improvement Plan
January 1, 2015 through December 31, 2019

Amended Second Revised Appendix 4

Projected Annual LTIIP Expenditures

Peoples-Equitable Division

Type (in millions \$)	2015	Applicable FERC Account No.			
Distribution Lines	\$28.5	376			
Company Owned Services	8.9	380			
Gathering Lines	0.3	332			
Storage Lines	0.0	353			
Transmission Lines	0.1	367			
Pipeline Integrity	0.0	Included in functional pipeline account			
Government Relocations	2.5	Included in functional pipeline account			
Meter Replacement	1.8	381 & 382			
Other Related Capitalized Costs					
Bar Coding/Mapping Tech.	0.0	303			
Smart Meter Technology	0.0				
Fleet	1.7				
M&R Station Upgrades/Improvements	0.3				
Grand Total	\$44.1				
Type (in millions \$)	2016	2017	2018	2019	5 year Avg.
Pipeline Replacement	\$31.6	\$47.6	\$54.0	\$59.0	\$44.7
Company Owned Services	9.8	11.8	12.5	13.4	11.3
Pipeline Integrity	0.0	0.0	0.0	0.0	0.0
Government Relocations	1.2	1.4	1.6	1.6	1.7
Meter Replacement	1.1	2.1	2.1	2.1	1.8
Total	\$43.7	\$62.9	\$70.2	\$76.1	\$59.5
Other Related Capitalized Costs					
Bar Coding/Mapping Tech.	0.0	0.0	0.0	0.0	0.0
Smart Meter Technology	0.0	0.0	0.0	0.0	0.0
Tools	0.4	0.3	0.0	0.0	0.1
Fleet	4.3	1.3	0.0	0.0	1.5
M&R Station Upgrades/Improvements	0.8	1.0	1.0	1.0	0.8
Grand Total	\$49.2	\$65.5	\$71.2	\$77.1	\$61.4

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CERTIFICATE OF SERVICE

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

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William H. Roberts II

Dated this 11th day
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ACCOUNT
NO.

UPS ACCOUNT NO.

17A0E2

REFERENCE NUMBER

Peoples Natural Gas
Bill Roberts 412 208-6527
225 N. Shore Drive
Pittsburgh Pa 15212

EXTREMELY URGENT DELIVERY TO

TELEPHONE

Rosemary Chiavetta 717 772 7777
PA PUC
400 North Street
Harrisburg Pa 17120



3	WEIGHT	WEIGHT	DIMENSIONAL WEIGHT	
4	TYPE OF SERVICE	<input checked="" type="checkbox"/> NEXT DAY AIR	<input type="checkbox"/> EXPRESS (INT'L)	CHARGES 1
		FOR WORLDWIDE EXPRESS SHIPMENTS Mark an "X" in this box if shipment only contains documents of no commercial value.		<input type="checkbox"/> DOCUMENTS ONLY
5	OPTIONAL SERVICES	<input type="checkbox"/> SATURDAY PICKUP	<input type="checkbox"/> SATURDAY DELIVERY	
		<input type="checkbox"/> INSURED VALUE	\$ AMOUNT	\$
		<input type="checkbox"/> C.O.D.	\$ AMOUNT	\$
6	ADDITIONAL HANDLING CHARGE	<input type="checkbox"/> ADDITIONAL HANDLING CHARGE		\$
	TOTAL CHARGES			\$
7	METHOD OF PAYMENT	<input checked="" type="checkbox"/> BILL SHIPPER	<input type="checkbox"/> BILL RECEIVER	<input type="checkbox"/> BILL THIRD PARTY
		<input type="checkbox"/> CREDIT CARD	<input type="checkbox"/> American Express	<input type="checkbox"/> Diner's Club
			<input type="checkbox"/> Discover	<input type="checkbox"/> MasterCard
			<input type="checkbox"/> Visa	<input type="checkbox"/> CHECK

8 RECEIVERS / THIRD PARTY'S UPS ACCT. NO. OR MAJOR CREDIT CARD NO. EXPIRATION DATE

THIRD PARTY'S COMPANY NAME AND ADDRESS

9 SHIPPER'S SIGNATURE X

DATE OF SHIPMENT
4 11 2016

010191 130 11/00 W

UPS COPY



UPS Next Day Air[®]
UPS Worldwide ExpressSM
Shipping Document

WEIGHT	WEIGHT	DIMENSIONAL WEIGHT	

The shipper certifies that the goods are being forwarded for export control and customs purposes. The shipper certifies that these commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Deviation contrary to U.S. law is prohibited.

☐ EXPRESS (INT'L)

☐ DOCUMENTS ONLY

SATURDAY DELIVERY ☐

J130 919 084 6



J130 919 084 6

EXPORT

SHIPMENT FROM



1111111111

REFERENCE NUMBER

Peoples Natural Gas

TELEPHONE

Bill Roberts

412 208-6527

225 N. Shore Drive

Pittsburgh Pa 15212

DELIVERY TO

TELEPHONE

Rosemary Chiavella
PA PUC

400 North Street

Harrisburg Pa 17120

Residential



UPS Next Day Air[®]
EXTREMELY URGENT

J130 919 084 6



J130 919 084 6

TRACKING NUMBER

DATE OF SHIPMENT

4/11/2016

DELIVERY