Focused Management and Operations Audit of Peoples Natural Gas Company LLC Peoples Natural Gas Company LLCEquitable Division

(Collectively referred to as The Peoples Companies)

Peoples TWP LLC

Prepared By The
Pennsylvania Public Utility Commission
Bureau of Audits
Issued October 2016

Docket Nos. D-2015-2485264, D-2015-2485265, D-2015-2485266

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I. INTRODUCTION

In accordance with the Pennsylvania Public Utility Commission's (PUC or Commission) program to identify improvements in the management and operations of fixed utilities under its jurisdiction, it was determined that a focused management and operations audit should be conducted of Peoples Natural Gas Company LLC (Peoples Gas), Peoples Natural Gas Company LLC - Equitable Division (Equitable Division) and Peoples TWP LLC (Peoples TWP) collectively referred to as the Peoples Companies. Peoples Gas is a subsidiary of PNG Companies LLC, which is a subsidiary of LDC Holdings LLC. Peoples TWP is a subsidiary of LDC Holdings II LLC. As both LDC Holdings LLC and LDC Holdings II LLC are subsidiaries of LDC Funding LLC, which is a subsidiary of SteelRiver LDC Ventures LLC, the focused management and operations audits of the Peoples Companies were conducted concurrently as they are under a common ownership. Management and operational reviews, which are required of certain utility companies pursuant to 66 Pa. C.S. § 516(a), come under the Commission's general administrative power and authority to supervise and regulate all public utilities in the Commonwealth, 66 Pa. C.S. § 501(b). More specifically, the Commission can investigate and examine the condition and management of any public utility, 66 Pa. C.S. § 331(a).

This report represents the written product of the focused management and operations audit and contains the resultant findings and recommendations for improvement in the management and operations of the Peoples Companies. The findings presented in the report identify certain areas and aspects where weaknesses or deficiencies exist. In all cases, recommendations have been offered to improve, correct, or eliminate these conditions. The final and most important step in the management audit process is to initiate actions toward implementation of the recommendations.

A. Objectives and Scope

The objectives of this focused management and operations audit were threefold:

- To provide the Commission, the Peoples Companies, and the public with an assessment of the efficiency and effectiveness of the Peoples Companies' operations, management methods, organization, practices, and procedures.
- To identify opportunities for improvement and develop recommendations to address those opportunities.
- To provide an information base for future regulatory and other inquiries into the management and operations of the Peoples Companies.

The scope of this audit was limited to certain areas of the Peoples Companies as explained in Section B, Audit Approach.

B. Audit Approach

This focused management and operations audit was performed by the Management Audit Staff of the PUC's Bureau of Audits (Audit Staff). The audit process began with a pre-field work analysis as outlined below:

- A five-year internal trend and ratio analysis (see Appendices A through F) was completed using financial and operational data obtained from the Peoples Companies, Commission, and other available sources. This analysis, which focused on the period 2010-2014, was supplemented by comparisons to a panel of natural gas utilities for the period 2010-2014 (see Appendix G).
- Input was solicited from Commission Bureaus and Offices, certain external parties, and the Peoples Companies regarding any concerns or issues they would like to have addressed during the course of our review.
- Prior management and operations audits, follow-up management efficiency investigations, implementation plans, implementation plan progress reports, other Commission conducted audits, annual diversity reports, and other available documents were reviewed.

Information from the above steps was used to initially focus the Audit Staff's work efforts in the field. Specifically, the following areas or functions were selected for an in-depth analysis and are included in this report:

- Executive Management and Organizational Structure
- Corporate Governance
- Affiliated Relationships and Cost Allocations
- Financial Management
- Gas Operations
- Customer Service
- Emergency Preparedness
- Human Resources
- Materials Management
- Information Technology
- Fleet Management

The pre-field work analysis should not be construed as a comprehensive evaluation of the management or operations in the functional areas not selected for in-depth examination. Had we conducted a thorough review of those areas, weaknesses or deficiencies may have come to our attention that were not identified in the limited pre-field work review.

The actual fieldwork began on August 17, 2015 and continued intermittently through April 18, 2016. The principal components of the fact gathering process included:

- Interviews with the Peoples Companies and other affiliate personnel as well as other Commission Bureaus.
- Analysis of records, documents, and reports of a financial and operational nature. This analysis focused primarily on the period 2010-2014, and the year 2015, as available.
- Visits to the corporate offices of the Peoples Gas which includes the customer contact center and the dispatch office, various service centers which included warehouses and the field worker training center, meter reading ride alongs, and observation of selected work practices.

C. Functional Area Ratings

For the functions or areas of the Peoples Companies that were selected for in-depth examination, the Audit Staff rated the actual operating or performance level relative to the expected performance level at the time of the audit. This expected performance level is the state at which each area or function should be operating given the Peoples Companies' resources and general operating environment. Expected performance is not a "cutting edge" operating condition; rather, it is management of an area or function such that it produces reasonably expected operating results.

Presented below are the evaluative categories utilized to rate each function or area's actual operating or performance level relative to its expected performance level:

- Meets Expected Performance Level
- Minor Improvement Necessary
- Moderate Improvement Necessary
- Significant Improvement Necessary
- Major Improvement Necessary

Our ratings for each function or area reviewed in-depth can be found in Exhibit I-1 on the next page.

Exhibit I – 1 Peoples Companies Focused Management and Operations Audit Functional Rating Summary

Functional Area	Meets Expected Performance Level	Minor Improvement Necessary	Moderate Improvement Necessary	Significant Improvement Necessary	Major Improvement Necessary
Executive Management and Organizational Structure	х				
Corporate Governance			X		
Affiliated Relationships and Cost Allocations				х	
Financial Management		X			
Gas Operations				X	
Customer Service			Х		
Emergency Preparedness	х				
Human Resources		X			
Materials Management		Х			
Information Technology	x				
Fleet Management			Х		

D. <u>Benefits</u>

Where possible, the Audit Staff attempts to quantify the potential savings that would be expected from effectively implementing the recommendations made in this report. The audit report contains quantified potential annual cost savings of approximately \$329,000 from effective implementation of the recommendations. We try to identify, whenever it is reasonably practical, the potential savings net of the projected costs for implementation. Some of these savings could be considered an actual reduction in costs, avoided costs or increased revenues; whereas others would result from better deployment and/or use of existing resources. These quantifications require some judgment and may require efforts beyond the scope of the audit for further refinement. Therefore the actual benefits from effective implementation of the recommendations are subject to some degree of uncertainty, and could be higher or lower than the amounts estimated by the Audit Staff. An overall summary of the annual and one-time cost savings quantified in the audit report are shown in Exhibit I-2.

Exhibit I – 2 Peoples Companies Focused Management and Operations Audit Quantifiable Savings Summary

Recommendation	Annual Savings	One-Time Savings
Increase third-party line hit damage collection performance by transferring the responsibilities to the General Counsel to actively pursue and litigate damage claims.	Peoples Gas: \$121,000 Equitable Division: \$66,000	-
Expedite the implementation of a uniform Theft of Service (TOS) program for the Peoples Companies.	Peoples Gas: \$54,000	
Study potential solutions to reduce arrearages and minimize write-offs.	Peoples Gas: \$43,000	-
Implement Automated Meter Reading (AMR)/smart meter technology as planned to minimize meter reading and billing errors.	Peoples Gas: \$35,000 Peoples TWP: \$10,000	-
Subtotals by Company Peoples Gas Total	\$253,000	
Equitable Division Total	\$66,000	_
Peoples TWP Total Totals for All Companies	<u>\$10,000</u> \$329,000	

For the majority of recommendations, it is not possible or practical to estimate quantitative benefits as their benefits are of a qualitative nature or there was insufficient data available to quantify the impact. For example, it is difficult to estimate the actual benefit where new management practices or procedures are recommended where such did not previously exist or was not fully functional. Similarly, changes in work flow processes or to implement good business practices will result in improved effectiveness and efficiency of a specific function but cannot be easily quantified.

The Peoples Companies will have varying ways to implement the recommendations and as a result the Audit Staff has not estimated the cost of implementation for recommendations where no savings were quantified. However, it should be noted by the reader that the cost of implementing certain recommendations could be significant.

E. Recommendation Summary

Chapters III through XIII provide findings, conclusions, and recommendations for each function or area reviewed in-depth during this focused audit. Exhibit I-3 summarizes the recommendations with the following priority assessments for implementation:

➤ <u>INITIATION TIME FRAME</u> – Estimated time frame on how quickly the Peoples Companies should be able to initiate its implementation efforts given the Peoples Companies' resources and general operating environment. The time necessary to complete implementation is expected

to vary depending on the nature of the recommendation and the scope of the efforts necessary and resources available to effectively implement the recommendation.

- ➢ <u>BENEFITS</u> Net quantifiable benefits have been provided where they could be estimated as discussed in Section D Benefits. Our estimated overall level of benefits rankings are not solely based on quantifiable dollars but rather the Audit Staff's assessment of the potential overall impact of the recommendation on the efficiency and/or effectiveness of the Peoples Companies and/or the services it provides.
 - HIGH BENEFITS Implementation of the recommendation would result in major service improvements, substantial improvements in management practices and performance, and/or significant cost savings.
 - MEDIUM BENEFITS Implementation of the recommendation would result in important service improvements, meaningful improvements in management practices and performance, and/or meaningful cost savings.
 - <u>LOW BENEFITS</u> Implementation of the recommendation is likely to result in service improvements, management practices and performances, and/or enhance cost controls.

Peoples Companies Summary of Recommendations

Rec. No.	Recommendation	Page No.	Initiation Time Frame	Benefits (including \$ estimates)						
Chapter III – Executive Management										
None.										
Chapt	Chapter IV – Corporate Governance									
IV-1	Provide periodic written status reports to the Risk & Audit Committee in regards to all outstanding internal audit recommendations.	29	3-6 Months	Medium						
IV-2	Modify the proposed Internal Audit reporting structure so that the head of the Internal Audit Department reports functionally to the Risk and Audit Committee and administratively to the President & CEO.	29	6–12 Months	Medium						
Chapt	er V – Affiliated Relationships and Cost Allocati	ions								
V-1	Develop a cost allocation manual, distribute it to appropriate employees, and provide periodic training on proper time allocation and expense to all Peoples Companies' employees, in order to ensure consistent application of cost allocation policies and procedures among all affiliates.	44	3-6 Months	Medium						
V-2	Conduct periodic internal audits of affiliate transactions and the cost allocations process.	44	6-18 Months	Medium						
V-3	File revised affiliated interest agreements that accurately describe the transactions and cost allocation of services provided between the Peoples Companies and their affiliates.	44	3-6 Months	Medium						
Chapt	er VI – Financial Management									
VI-1	Establish a written dividend policy that documents the procedures for determining the level of dividend payments.	49	30 Days	Medium						
Chapt	er VII – Gas Operations									
VII-1	Expedite the replacement of unprotected bare steel pipe to ensure Long Term Infrastructure Improvement Plan (LTIIP) targets are met for each of the Peoples Companies.	68	12+ Months	Medium						
VII-2	Develop a staffing plan that accounts for the pending retirements while addressing the need for additional qualified personnel to perform all field operations activities and ensure the completion of future LTIIP pipeline replacement projects.	68	3-6 Months	High						
VII-3	Address excessive individual overtime levels through corrective measures; such as shift resources, standardizing and enforcing emergency call-out procedures, etc.	68	6-12 Months	Medium						

Peoples Companies Summary of Recommendations

Rec. No.	Recommendation	Page No.	Initiation Time Frame	Benefits (including \$ estimates)				
Chapt	Chapter VII – Gas Operations (continued)							
VII-4	Develop and implement an Emergency Response Improvement Plan that addresses controllable causes to excessive emergency dispatch and response times to conform to merger commitments.	68	0-6 Months	Medium				
VII-5	Increase third-party line hit damage collection performance by transferring the responsibilities to the General Counsel to actively pursue and litigate damage claims.	68	0-3 Months	Medium Peoples Gas: \$121,000 Annual Savings Equitable Division: \$66,000 Annual Savings				
Chapt	er VIII – Customer Service							
VIII-1	Accelerate efforts to eliminate inside meter sets to comply with PUC regulations.	82	0-12 Months	Medium				
VIII-2	Expedite the implementation of a uniform TOS program for the Peoples Companies.	82	3-6 Months	Medium Peoples Gas: \$54,000 Annual Savings				
VIII-3	Study potential solutions to reduce arrearages and minimize write-offs.	82	3-6 Months	Medium Peoples Gas: \$43,000 Annual Savings				
VIII-4	Improve the identification of dispute causes by using the 2010 dispute reason codes in order to minimize the number of future customer disputes.	82	30 Days	Medium				
VIII-5	Implement AMR/smart meter technology as planned to minimize meter reading and billing errors.	82	0-12 Months	Medium Peoples Gas: \$35,000 Annual Savings Peoples TWP: \$10,000 Annual Savings				
Chapt	er IX – Emergency Preparedness							
	None.							
Chapt	Chapter X – Human Resources							
X-1	Continue to monitor training, methodologies, equipment and ergonomic needs which address the primary causes of accidents and initiate changes or introduce new programs as needed.	96	0-12 Months	Low				

Peoples Companies Summary of Recommendations

Rec. No.	Recommendation	Page No.	Initiation Time Frame	Benefits (including \$ estimates)					
Chapt	Chapter XI – Purchasing and Materials Management								
XI-1	Designate emergency stock for the Equitable Division and Peoples TWP.	104	0-12 Months	Low					
XI-2	Survey, evaluate, and utilize best practices of other utilities using a third-party purchasing and material delivery vendor in order to determine best practices for materials management and reasonable inventory turnover performance for the Peoples Companies.	104	12+ Months	Low					
Chapt	er XII – Information Technology								
	None.								
Chapt	er XIII – Fleet Management								
XIII-1	Perform a periodic lease versus buy analysis and utilize the least cost alternative for acquiring vehicles and equipment.	112	6-12 Months	Medium					
XIII-2	Complete the cost benefit analysis for vehicle maintenance services and, if cost justified, perform additional basic maintenance services with Company personnel.	112	3-6 Months	Medium					

II. BACKGROUND

Peoples Natural Gas Company LLC (Peoples Gas), Peoples Natural Gas Company LLC – Equitable Division (Equitable Division), and Peoples TWP LLC (Peoples TWP), collectively referred to as the Peoples Companies, are natural gas utility operating companies ultimately owned by SteelRiver LDC Ventures LLC (LDC Ventures) through indirect subsidiaries. The background and relationships of LDC Ventures and the Peoples Companies are described below.

A. SteelRiver LDC Ventures LLC

SteelRiver Infrastructure Partners LP, a Delaware limited partnership (SRIP), with its main offices in San Francisco, California and New York, New York, is an independent investment management firm that invests in core infrastructure assets in North America. SRIP owns SteelRiver Infrastructure Associates LLC, and its affiliated investment management entities (collectively referred to as SteelRiver), which is the general partner that manages an unlisted infrastructure investment vehicle, formerly managed by Babcock & Brown Infrastructure Fund North America that is now SteelRiver Infrastructure Fund North America LP (SRIFNA)¹, with committed capital in excess of \$1.9 billion and approximately \$2.5 billion of co-investor equity capital. SRIFNA owns a majority interest in SteelRiver LDC Ventures LLC (LDC Ventures), a Delaware limited liability company. LDC Funding LLC (LDC Funding) is a Delaware limited liability company and a wholly-owned direct subsidiary of LDC Ventures. LDC Funding owns a 100% interest in LDC Holdings LLC (Holdings), which in turn owns a 100% interest in Peoples Gas. LDC Funding also directly owns a 100% interest in LDC Holdings II LLC (Holdings II), which in turn owns a 100% interest in Peoples TWP. Among SteelRiver's investments are Diversified Port Holdings, Natural Gas Pipeline Company of America, Trans Bay Cable, Patriot Rail, and the Peoples Companies.

B. The Peoples Companies

A brief overview of the recent histories and significant events/changes of Peoples, Peoples TWP, and the Equitable Division is as follows:

Peoples Natural Gas Company LLC

- November 2009 The Pennsylvania Public Utility Commission Approved SteelRiver acquiring The Peoples Natural Gas Company d/b/a Dominion Peoples.
- February 2010 PNG Companies LLC, an indirect subsidiary of SteelRiver, acquired The Peoples Natural Gas Company and its name changed to Peoples Natural Gas Company LLC.

¹ In May 2009, Babcock and Brown's equity interest in this infrastructure investment vehicle was sold to new equity partners, and as a result of the sale, the fund's assets were managed by the same management team under the newly created entity SRIFNA.

- New Peoples Gas departments were created upon the acquisition to fulfill functions previously provided by Dominion Resources, Inc. subsidiaries, including: Gas Supply, Accounting, Finance, Treasury, Human Resources, Information Technology (IT), and Customer Service.
- June 2011 The new in-house call center and new customer service / billing system become operational.
- June 2011 Transition Services Agreement with Dominion ends. New systems become operational for Accounting, Transportation, and other functions previously provided by Dominion.
- The additional departments and in-house call center add approximately 200 positions to Peoples Gas (see Exhibit HR-3 for staffing history).

Peoples TWP LLC

- May 2011 T.W. Phillips Gas and Oil Co. (T.W. Phillips) is acquired by LDC Holdings II LLC, an indirect subsidiary of SteelRiver, and its name is changed to Peoples TWP LLC.
- Approximately 200 former employees of T. W. Phillips became Peoples TWP employees.
- Peoples TWP and Peoples Gas are not merged upon the acquisition but continue to operate as separate legal entities.
- IT and Supervisory Control and Data Acquisition systems converted to Peoples Gas systems upon the acquisition.
- June 2012 The formation of a service company, Peoples Service Company, LLC (PSC), is approved by the PUC. Additionally, the PUC approves an operational service agreement between Peoples Gas and Peoples TWP.

• Peoples Natural Gas Company LLC - Equitable Division

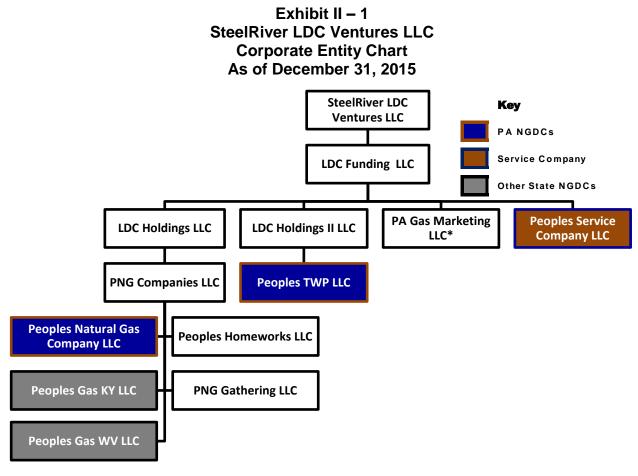
- December 2013 PNG Companies LLC, an indirect subsidiary of SteelRiver, acquired Equitable Gas Company LLC from EQT Corporation and merged the utility as an operating division of Peoples Gas known as Peoples Natural Gas Company LLC – Equitable Division. The Equitable Division maintains separate rate and tariffs from Peoples Gas.
- Approximately 300 former employees of Equitable Gas became employees of Peoples Gas.
- 93 different IT and Operational systems are converted to Peoples Gas systems at closing.

Beginning in 2014, there were a number of additional changes that have taken place at the Peoples Companies:

- January 2014 Peoples TWP's billing and customer service systems are converted into the Peoples Gas system.
- Throughout 2014 Standardization of local gas contracts for Peoples Gas and Peoples TWP. Additionally, a gas exchange agreement was established between Peoples Gas and Peoples TWP.

- November 2014 Formation of a Cyber Security Section, within the IT Department.
- January 2015 Expansion of the Construction Organization (see Chapter VII Gas Operations).
- February through June 2015 The formerly outsourced call center for Equitable Gas was brought in-house. As of June 2015, most customer service related activities are performed by PSC. This includes billing, the call center, and limited aspects of meter reading (see Chapter VIII – Customer Service).

Additional changes to organizational, operational, and strategic planning resulting from the recent and continued changes that occurred during the management audit are detailed in Chapter III – Executive Management. An overview of the corporate structure of the parent of Peoples Companies is presented in Exhibit II-1. Note that the Equitable Division is considered a division of Peoples Gas and therefore is not displayed.



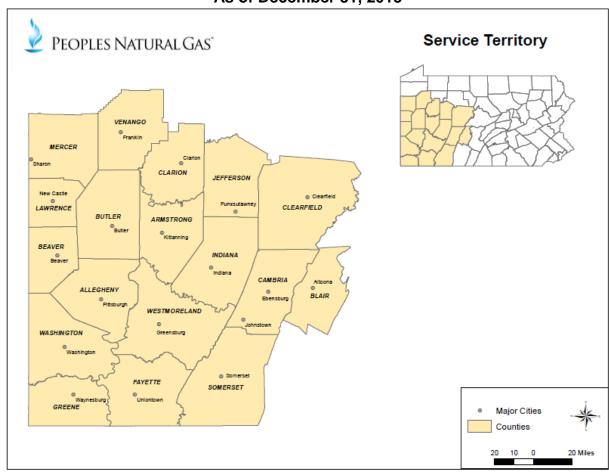
* PA Gas Marketing LLC no longer holds a supplier license at Docket No. A-2010-2216091. Energy Choice supplier related activity ended effective with the date of the Equitable Gas Company transaction on December 16, 2013. PA Gas Marketing LLC surrendered its natural gas supplier license on July 9, 2014 and ended its warranty program contract on September 1, 2015.

Source: Data Request EM-1

The Peoples Companies' service area is displayed in Exhibit II-2. This territory lies within Southwest Pennsylvania with the Peoples Companies' headquarters located in Pittsburgh, Pennsylvania. The service territory for each company is as follows:

- Peoples Gas The service territory of Peoples Gas overlaps portions of the service territories of what would become the Equitable Division and Peoples TWP. As of December 31, 2015, Peoples Gas served 361,331 customers in Allegheny, Armstrong, Beaver, Blair, Butler, Cambria, Clarion, Fayette, Greene, Indiana, Lawrence, Mercer, Somerset, Venango, Washington, and Westmoreland counties.
- The Equitable Division Similar to Peoples Gas, the service territory of the Equitable Division overlaps portions of the service territories of Peoples Gas and Peoples TWP. As of December 31, 2015, the Equitable Division served 264,302 customers in Allegheny, Armstrong, Beaver, Butler, Clarion, Greene, Indiana, Jefferson, Washington, and Westmoreland Counties.

Exhibit II – 2
Peoples Companies
Service Territory
As of December 31, 2015



Source: Data Request EM-33

 Peoples TWP – The service territory of Peoples TWP consists of the northern portion of the current Peoples Companies' service territories with the center of the territory for the most part located in Butler, Pennsylvania. As of December 31, 2015, Peoples TWP served 61,071 customers in Allegheny, Armstrong, Beaver, Butler, Cambria, Clarion, Clearfield, Indiana, Jefferson, and Westmoreland Counties.

The combined staffing complement of the Peoples Companies including PSC is displayed in Exhibit II-3. A more detailed staffing examination is presented in Chapter X – Human Resources, Exhibit X-3.

Exhibit II – 3
Peoples Companies and Peoples Service Company
Employee Statistics
As of December 31, 2015

	Peoples Gas	Equitable Division	Peoples TWP	PSC	Total
Bargaining	400	178	121	0	699
Non-Bargaining	321	49	47	114	531
Total Employees	721	227	168	114	1,230

Source: Data Request EM-27

A summary for each of the Peoples Companies with respect to number of customers, usage, and revenues by customer class as of year-end 2015 is shown in Exhibit II-4. Residential customers comprise 92.3%, 93.2%, and 93.0% of total customers; 44.2%, 48.9%, and 19.7% of usage; and 74.7%, 75.9%, and 69.1% of revenue for Peoples Gas, the Equitable Division, and Peoples TWP, respectively. Commercial customers comprise 7.6%, 6.7%, and 6.9% of total customers; 24.4%, 28.1%, and 11.0% of usage; and 20.4%, 21.7%, and 22.4% of revenue for Peoples Gas, the Equitable Division, and Peoples TWP, respectively. Industrial customers comprise 0.1%, 0.1%, and < 0.1% of total customers; 31.4%, 23.0%, and 69.3% of usage; and 4.9%, 2.4%, and 8.5% of revenue for Peoples Gas, the Equitable Division, and Peoples TWP, respectively.

Exhibit II – 4
Peoples Companies
Customer Statistics
As of December 31, 2015

Customer Class	Number of Customers	Percentage of Customers	MCF Sold	Percentage of MCF Sold	Revenues	Percentage of Revenues	
Peoples Gas							
Residential	333,657	92.3%	30,658,792	44.2%	270,541,105	74.7%	
Commercial	27,470	7.6%	16,919,803	24.4%	73,997,383	20.4%	
Industrial	200	0.1%	21,804,359	31.4%	17,803,676	4.9%	
Totals	361,327	100.0%	69,382,954	100.0%	362,342,164	100.0%	
		Eq	uitable Divisio	on			
Residential	246,372	93.2%	21,839,630	48.9%	209,352,391	75.9%	
Commercial	17,753	6.7%	12,575,481	28.1%	59,971,659	21.7%	
Industrial	154	0.1%	10,264,361	23.0%	6,543,461	2.4%	
Totals	264,279	100.0%	44,679,472	100.0%	275,867,511	100.0%	
		I	Peoples TWP				
Residential	56,806	93.0%	4,975,761	19.7%	58,014,136	69.1%	
Commercial	4,238	6.9%	2,768,643	11.0%	18,788,932	22.4%	
Industrial	23	<0.1%	17,475,487	69.3%	7,145,492	8.5%	
Totals	61,067	100.0%	25,219,891	100.0%	83,948,560	100.0%	

Source: PUC Annual Reports and Auditor's Analysis

III. EXECUTIVE MANAGEMENT AND ORGANIZATIONAL STRUCTURE

Background

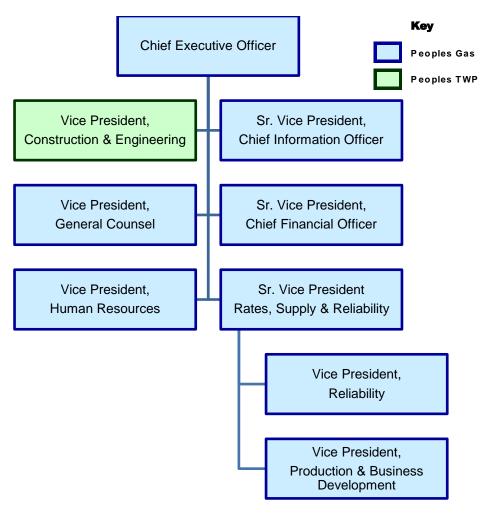
Peoples Natural Gas Company LLC (Peoples Gas), Peoples Natural Gas Company LLC – Equitable Division (Equitable Division), and Peoples TWP LLC (Peoples TWP), collectively referred to as the Peoples Companies, are natural gas utility operating companies ultimately owned by SteelRiver LDC Ventures LLC which is indirectly controlled by SteelRiver Infrastructure Partners LP (collectively referred to as SteelRiver). The corporate entity structure for the Peoples Companies is displayed in Exhibit II-2 of Chapter II – Background.

Executive positions at the Peoples Companies are defined as "officers". Exhibit III-1 displays the officers at the Peoples Companies as of April 1, 2016. As a division of Peoples Gas, the Equitable Division has the same officers as Peoples Gas. On April 1, 2016 the Peoples Companies reorganized their reporting structure in conjunction with offers to qualifying employees for voluntary early retirements. The actual retirements are expected to take place throughout the 2016 year (this will be discussed later in this chapter). Due to the offer for early retirement, three officers are expected to be retiring in 2016. Subsequent to these retirements, nine employees defined as officers will remain at the Peoples Companies. Eight of the nine officers are Peoples Gas employees and one of the officers is a Peoples TWP employee. Although these positions are specific employees to one of the distribution companies or potentially, Peoples Service Company, LLC (PSC) (note that one of the retiring officers was an employee of PSC), in many cases employees from the other distribution company report to these positions as well. For example, a Peoples Gas supervisor may have reports from Peoples TWP employees. As part of the review of the officer positions, the Audit Staff reviewed compensation and benefits as well. Note that officer compensation and benefits are discussed in Chapter X – Human Resources Background.

In recent years, strategic planning has been based significantly upon making SteelRiver acquisition transitions, replacement of high risk pipelines, maintaining safety and reliability, and improving efficiencies among other strategic areas. The most recent strategic plan reviewed by Audit Staff during our audit field work was the 2015 plan. It was based upon a four point vision of safety, customer commitment, long-term economic growth, and culture.

Generally speaking, the timeline for developing the strategy and goal planning process begins in September continuing into early October when the strategy, vision, and values are reviewed and approved by the Chief Executive Officer (CEO) (who also reviews and approves all steps which will follow). Then, in mid-October to early November the goals and key metrics are established. In mid-November to January departmental goals are established. Finally in January to February, individual performance goals are established. These goals are monitored and reported on throughout the year.

Exhibit III – 1
Peoples Companies
Company Officers
As of April 1, 2016



Source: April 2016 update to Data Request EM-2

In addition to traditional strategic goals of business expansion, reliability, and customer satisfaction, the Audit Staff also noted that the Peoples Companies were maintaining obligations which were promised as conditions of the SteelRiver purchase of Equitable Gas Company in their strategic planning. On November 14, 2013, at Docket Nos. A-2013-2353647, A-2013-2353649, and A-2013-2353651, the Pennsylvania Public Utility Commission (PUC or Commission) approved the Joint Petition for Approval of Settlement of All Issues (Settlement Agreement) pertaining to the merger and acquisition of Equitable Gas Company submitted by Peoples Gas, Peoples TWP, the Equitable Division and various other interested parties.² As part of

² Other parties to the Settlement Agreement include the PUC's Bureau of Investigation and Enforcement, Office of Consumer Advocate, Office of Small Business Advocate, Pennsylvania Independent Oil & Gas Association, Dominion Retail, Inc. and Interstate Gas Supply, Inc., Snyder Brothers, Inc., United States Steel Corporation, and Citizens for Pennsylvania's Future.

the Settlement Agreement, the Peoples Companies agreed to various terms and conditions. The majority of the conditions are either ongoing or only get enacted if a change occurs to present conditions (e.g., conditions that apply if SteelRiver desires a change in ownership, etc.). Among the more significant conditions of the Equitable Gas Company acquisition and merger are the following:

- Various agreed upon items in the Long-Term Infrastructure Improvement Plan (LTIIP). Of particular interest is the replacement of aging unprotected steel pipe. See Chapter VII – Gas Operations for a more detailed overview of the LTIIP.
- Numerous customer service issues, such as quality of service metrics and universal service plan obligations.
- Investment in the local community. SteelRiver will maintain the Peoples Gas
 corporate headquarters in the Peoples Gas service area in or near Pittsburgh
 for at least ten years after the November 1, 2013 closing and will only move
 the headquarters after that time upon approval by the Commission.
 Additionally, the Peoples Companies have agreed to invest in various
 community needs, such as donations and sponsorships of heat assistance
 programs and grants.
- The distribution companies will be ring fenced from the other affiliates and will
 establish reasonable accounting controls to govern transactions with affiliates.
 Additionally, Peoples Gas will maintain separate accounting for the Peoples
 Division and Equitable Division operations sufficient to provide all
 Commission required financial statements. Separate accounting records will
 also be maintained for operations in West Virginia and Kentucky. See
 Chapter V Affiliated Relationships and Cost Allocations for more discussion
 on ring fencing.
- Various financial stipulations regarding debt/equity and dividends between entities, etc.
- The commitment to protect collective bargaining unit positions and placement assistance for any employee terminated from the Equitable Division or Peoples Gas for one year after the agreement.

Monitoring of the Peoples Companies performance by the officers is accomplished through monthly receipt of business plan updates (combined reports for Peoples Gas and Peoples TWP) and also through receipt of more comprehensive quarterly management reports for Peoples Gas and Peoples TWP in separate reports (the Peoples Gas report includes the Equitable Division). The monthly report contains the financial status of combined Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) revenues and expenses in addition to information that would be pertinent to the Peoples Companies strategic goals. For example, in 2015, the customer information system conversion status, which was a major component to the

2015 strategic plan, was included in the monthly report. The quarterly report for each distribution company is more detailed and includes information such as financial and operating overview highlights, economic and industry trends, natural gas storage and pricing, heating degree days, and then specific performance reporting on safety, unaccounted for gas, LTIIP implementation status, capital projects, customer service metrics, EBITDA and financial issues such as incomes, balance sheets, cash flow, and expenses, and human resource related issues such as staffing. Areas are coded red, yellow, or green depending on the status of performance for each particular area (e.g., a red coded area would indicate that a particular goal is not on track to meet the target for the year, a yellow coded area indicates that the goal is currently getting met but not by a comfortable margin or trending in the wrong direction and a green code would indicate the goal is on track).

Included in the performance monitoring are annual benchmarking reports which detail the Peoples Companies against two different panels. The first panel is an American Gas Association (AGA) member utilities panel and the other panel is comprised of public electric and natural gas utilities. There are a total of 85 companies in the AGA panel and 28 companies in the public electric and natural gas utilities panel. Areas of comparison include distribution operations and maintenance costs, uncollectable expense levels, emergency response times, number of leaks, safety metrics, and third party line hits.

To encourage pay for performance, the Peoples Companies offer incentive pay via its Annual Performance Incentive Plan (APIP). Incentives are determined by a mix of "Company Goals" (the overall Peoples Companies performance) and "Department Goals" (specific to each company department). The CEO and officers have a higher percentage of their APIPs based upon Company Goals while the rest of the Peoples Companies employees (i.e., directors, managers, supervisors, union, and other employees) have a higher percentage of their APIPs based upon Department Goals. The Company Goals consist of goals for the following categories: safety, efficiency, customer experience, growth, regulatory commitments, and financial goals. The APIP process is more fully explained in the background of Chapter X – Human Resources.

The Audit Staff evaluated staffing levels dating back to the SteelRiver purchase of Peoples Gas from Dominion Resources, Inc. A full review of staffing for the Peoples Companies is presented in Chapter X – Human Resources, while specific department staffing reviews were conducted for field operations (see Chapter VII – Gas Operations) and customer service (see Chapter VIII – Customer Service).

Succession Planning occurs annually and is the responsibility of the Vice President of Human Resources and the Director of Organizational Development and Corporate Staffing (see the background in Chapter X – Human Resources for reporting structure). Each department's succession plan is discussed and generated with the appropriate department head's Senior Vice President or Vice President. The comprehensive companies-wide plan is reviewed with the CEO. A hard copy of the plan is prepared every three years and resides with the Vice President of Human Resources, the Director of Organizational Development and Corporate Staffing, and the CEO. A soft copy (updated plan with newer changes based on current events) is kept

with the Director of Organizational Development and Corporate Staffing. Included in the plan are key leadership positions by department and the turnover risk and retirement potentials and potential successors. There are degrees of readiness discussed as well. For example, a successor may be one of four different degrees of readiness; ready now, ready within a year, ready in one to two years, and an emerging leader with high potential.

At the initiation of the management audit in August 2015, the Audit Staff conducted a span of control review for the management and supervisory positions at the Peoples Companies based on data from July 2015 as shown in Exhibit III-2. In general, for maximum organizational efficiency and effectiveness, a company should ideally aim for spans of control in the range of 1:4 to 1:9 to control layers of management and maintain effective communications. Three departments had lower spans of control than the typical targeted ratio; Human Resources, Treasury, and Rates. However, because these departments work in more specialized areas of the Peoples Companies, the Audit Staff considered these spans to be acceptable. One department, Customer Experience, had a higher span of control than the typical targeted ratio. This was due to a having a larger group with less of a need of supervision due to repetitive work (this department has employees which typically are engaged in field visits to residences). From an overall perspective, the Audit Staff found all reporting relationships at the Peoples Companies to be reasonable. However, it should be noted that the Peoples Companies initiated a major reorganization near the end of our audit fieldwork. As of April 2016, some portions of the new organization were still being determined. Consequently, a complete spans of control analysis could not be conducted on the new Peoples Companies organization.

Exhibit III – 2
Peoples Companies
Spans of Control by Department
As of July 2015

Department	Span of Control
Human Resources	1:2
Treasury	1:2
Rates	1:3
Business Development & Gas Supply	1:4
Controllers	1:4
Information Technology	1:4
Executive	1:5
Sales / Community Relations	1:5
Gas Operations	1:7
Customer Service	1:9
Customer Experience	1:13

Source: Data Request EM-21

At the initiation of the audit in August 2015, and continuing until it's commencement in April of 2016, there were many changes and continuous implementations to the operational structure and systems at the Peoples Companies. Among these changes were the following:

- The continued system conversions for use of SAP enterprise software for departmental systems for each of the Peoples Companies. Peoples Gas previously used SAP under ownership from Dominion Resources, Inc. (Dominion). As Peoples TWP and the Equitable Division were acquired, departmental systems were converted to shared SAP based systems. This process began with the separation of Peoples Gas from Dominion in February of 2010 and was ongoing as of the end of our audit fieldwork.
- The continued planning and staffing of a Construction Department originally created in the latter half of 2014 in order to perform all construction in-house. The Peoples Companies anticipate having the department fully staffed for Peoples and Peoples TWP by the 2017 construction season. (See Chapter VII - Gas Operations for a more detailed description).
- Emergency preparedness manuals combined into an all-encompassing plan.
 One set of emergency preparedness manuals (Physical Security Manual,
 Cyber Security Manual, Emergency Response Manual, and Business
 Continuity Manual) for Peoples Gas, the Equitable Division, and Peoples
 TWP were finalized in December of 2015. (See Chapter IX Emergency
 Preparedness for a more detailed description).
- Peoples Gas, Equitable Division, and Peoples TWP field operations unions were merged into a single union. This was ratified by the unions on April, 8, 2016.
- Voluntary Early Retirements in early 2016, Peoples Companies' employees were offered a voluntary early retirement package. For non-field union employees (non-union plus some customer service union employees), once a signed application for voluntary retirement was submitted, it could not be revoked by the employee. A total of 50 non-field union employees decided to accept this offer and retire early. For the field union employees, once the union contract was ratified on April, 8, 2016, any field salaried employees who had previously submitted an application had five business days to withdraw their application. As of the end of our audit field work (April 18, 2016), the number of field employees electing to accept the voluntary retirement offer had not been finalized. At the first offer (before the contract was ratified), 142 field employees had expressed interest in taking this offer; however, it was likely that some of these employees would withdraw their applications.

After the ratification of the union contract on April 8, 2016, the three field unions (Peoples Gas, Equitable Division, and Peoples TWP) were unified into one combined union. With this ratification, the Peoples Companies can now begin optimization of

service center locations, crew assignments, emergency response responsibilities, material warehouse consolidations and any other operational processes which were not previously possible because of agreements not to share field union employees or assets between distribution companies as a result of each of the SteelRiver acquisitions. For example, previously, if a Peoples Gas employee was the closest responder to an emergency call in a Peoples TWP location, this employee could not be assigned to respond. Now with the new union contract, this employee would be permitted to respond to the emergency. Similarly, a Peoples Gas district shop and an Equitable Division district shop may have been in close proximity to each other but both were kept active and the merger of these districts was not permitted. With the union contract ratification, these districts can now be combined. At the time of the close of the audit on April 18, 2016, no definitive plans had been made for service center or warehouse consolidation or any similar optimization of resources. However, the Peoples Companies could immediately begin to cross utilize employees among the previously separate unions. It is too early to measure the impact of the union merger qualitatively or quantitatively but the union merger is likely to have a positive impact on the Gas Operations and Materials Management functional areas. Specifically, the following issues will be impacted: Chapter VII - Gas Operations, Findings and Conclusions No. 2 (hiring of field employees), No. 3 (excessive overtime), No. 4 (emergency response), and Chapter XI – Purchasing and Materials Management Finding and Conclusion No. 2 (material turnover).

Findings and Conclusions

Our examination of the Executive Management and Organizational Structure function included a review of the Peoples Companies' organizational structure; staffing levels and spans of control; the roles and responsibilities of executive management; strategic planning; and succession planning. Based on our review, no evidence came to our attention that would lead the Audit Staff to conclude that the areas reviewed were not being addressed adequately.

Recommendation – None.

IV. CORPORATE GOVERNANCE

Background

As discussed in Chapter II – Background, Peoples Natural Gas Company LLC (Peoples Gas), Peoples Natural Gas Company LLC – Equitable Division (Equitable Division), and Peoples TWP LLC (Peoples TWP), collectively referred to as the Peoples Companies, are natural gas utility operating companies ultimately owned by SteelRiver LDC Ventures LLC which is indirectly controlled by SteelRiver Infrastructure Partners LP (collectively referred to as SteelRiver). The corporate entity structure for the Peoples Companies is shown in Exhibit II-2 of Chapter II – Background. Additionally, an overview of the histories; service territories of Peoples Gas, the Equitable Division, and Peoples TWP; and the SteelRiver acquisition of each are reviewed in Chapter II as well. Neither the Peoples Companies nor SteelRiver are publicly traded, thus they are not subject to the provisions of the Sarbanes-Oxley Act of 2002 (SOX) and the corporate governance rules of the New York Stock Exchange (NYSE Rules). However, as public utilities which are subject to regulation by the Pennsylvania Public Utility Commission (PUC or Commission), the Peoples Companies should be making an effort to abide by the spirit of both the SOX and NYSE Rules.

As of August 2015, Peoples Gas had a six-member Board of Directors (Board) comprised of the Chief Executive Officer (CEO) of the Peoples Companies, three partners of SteelRiver Infrastructure Partners, and two independent Board members. Since the Equitable Division is a division of Peoples Gas, the Peoples Gas Board makes decisions for the Equitable Division as well. Similarly, Peoples TWP had a five-member Board comprised of the same internal Board members as Peoples Gas (i.e., the CEO of the Peoples Companies and the three partners of SteelRiver Infrastructure Partners) plus one independent Board member. The Chairman of both Boards is a Senior Managing Partner of SteelRiver Infrastructure Partners. Different individuals serve as the independent members on each of the Boards. Each of the Directors has served on the respective Boards of Peoples Gas and Peoples TWP since the acquisition of each Company by SteelRiver. There are no formal selection policies and practices for the Board of Directors (i.e., there are no formal retirement age, tenure, or other restrictions for Board members), nor are there guidelines for Board member independence as the Peoples Companies are privately held companies that are not subject to the independence requirements of NYSE and the Securities and Exchange Commission. Board members were initially established by the Limited Liability Company Operating Agreements of Peoples Gas and Peoples TWP which includes the Chief Executive Officer. Thereafter, Board members are elected annually. The Peoples Companies indicated that they regularly seek guidance from their external auditor regarding effective Board composition and selection. Only the independent Board members are entitled to salary and fees in consideration for their respective Board duties, and these salary and fee structures appear to be reasonable and in line with other similarly sized-utilities. Each respective Board approves the operating and capital budgets on an annual basis. Each Board must also approve any expenditure in excess of \$1 million if it is not included in the annual operating or capital budgets. Quarterly management reports and monthly Business Plan updates are regularly distributed to

Board members. Each Board conducts its business on behalf of the Peoples Companies using the following committees, each with its own charter to set its governance guidelines³:

- Risk and Audit Committee Responsible for providing assistance to each Board in fulfilling its responsibilities with regard to its oversight of:
 - The integrity of the Peoples Companies' financial reports and statements.
 - o The independent auditor's qualifications, independence and performance.
 - o The Peoples Companies' corporate compliance program.
 - The Enterprise Risk Management Program and systems of internal control.
 - The processes for identifying significant risks, and implementation of appropriate and adequate control, monitoring, and reporting mechanisms.
 - o The performance of the Peoples Companies' internal audit function.

As of August 2015, the Risk and Audit Committee was comprised of five members, three of whom are independent, and meets at least three times per year. Two members of the Risk and Audit Committee are deemed financial experts; one a Certified Public Accountant and the other a Chartered Financial Analyst.

- Compensation Committee Responsible for providing assistance to each
 Board in fulfilling its responsibilities with regard to oversight of the design,
 administration and evaluation of the executive compensation plans, policies,
 and programs of the Peoples Companies. The Compensation Committee will
 advise and make recommendations to the Board with respect to the
 compensation of executive officers of the Peoples Companies, including:
 - Annual base salary and incentive opportunity level.
 - Long-term incentive opportunity level.
 - Employment, severance, and change in control agreements, in each case as, when and if appropriate.
 - Any special supplemental benefits.
 - Terms, conditions, and amounts of all long-term incentive compensation, etc., issued under any of the Peoples Companies' incentive plans.

As of August 2015, the Compensation Committee was comprised of six members, three of whom are independent. The Committee meets as often as the Chairperson of the Compensation Committee deems appropriate.

 Benefits Committee – Responsible for providing assistance to each Board in fulfilling its responsibilities with regard to its oversight of the employee benefit plans sponsored by the Peoples Companies and affiliates. The Committee meets as often as is required for the transaction of business that may properly come before the Committee; such meetings are designated by the Chair of

³ Each committee is comprised of the same members for both Peoples Gas and Peoples TWP.

the Committee. As of August 2015, the Benefits Committee was comprised of five employees of the Peoples Companies.

The Peoples Companies' internal audit (IA) function is performed by staff of Peoples Gas. The Risk and Internal Audit Charter defines the mission, scope of work, responsibilities of the head of the IA function (the Manager, Risk and Internal Audit), independence, authority, and standards of audit practice. The Manager, Risk and Internal Audit reports administratively and functionally to the Vice President and Treasurer, with unrestricted access to the President and CEO and Chairman of the Risk and Audit Committee. Internal Audit's scope of work includes implementation and ongoing management of the Enterprise Risk Management (ERM), Internal Audit, and Corporate Compliance Programs. IA attempts to ensure that:

- The ERM Program is effective.
- Risks are appropriately identified and managed.
- The Risk Register identified and appropriately addresses key risks.
- Interaction with the various governance groups occurs as merited.
- Significant financial, managerial, and operating information is accurate, reliable, and timely.
- Employee actions are in compliance with internal policies, standards, procedures, and applicable laws and regulations.
- Resources are acquired economically, used efficiently, and protected.
- Programs, plans, and objectives are achieved.
- Quality and continuous improvements are fostered in the organization's control process.
- Significant legislative or regulatory issues impacting the Peoples Companies are recognized and appropriately addressed.

The Risk and Audit Committee is responsible for the appointment, retention, compensation and oversight of the work of the independent auditor. The Risk and Audit Committee meets with the external auditors twice per year, to review the results of the annual external audit and to review the external audit plan for the next year (i.e., audit scope and approach). The current external auditor has been engaged since February of 2010. The external audit firm rotates the partner assigned to the audit every five years. In 2012, the Company undertook a significant Reguest for Proposal (RFP) process to select the independent auditors for the audit years 2012-2014. An internal RFP selection committee of seven employees was formed, with an external audit cost comparison performed as part of the RFP process. The ultimate recommendation of the RFP selection committee was submitted to the Risk and Audit Committee and subsequently approved by the Board in late July of 2012. The Company re-negotiated with the same external auditor for the audit years 2015-2017. The Risk and Audit Committee, and ultimately the Board, are responsible for monitoring the external auditor's performance. The Risk and Audit Committee has direct access to the external auditor to ask questions and its independent directors meet with the external auditor without management present.

The Code of Ethics and Business Conduct was established to define the policies and practices that govern ethical conduct and related compliance issues. Concerns can be reported to the Peoples Ethics Line via telephone or e-mail. The Conflict of Interest Policy provides guidance in avoiding conflicts or apparent conflicts of interest of the employee and the Peoples Companies.

Findings and Conclusions

Our examination of the Corporate Governance function included a review of the Peoples Companies' Boards of Directors' organization including committee structure and charters; Board fee structure; Director independence; documents related to principles of corporate governance; policies, practices, and procedures related to internal management controls; relationships with the independent auditor, performance of non-audit services by the independent auditor and policies related to rotation of audit firms; internal audit function; code of ethics; annual reports to shareholders; etc. Based on our review, the Peoples Companies should initiate or devote additional efforts to improving the efficiency and/or effectiveness of their corporate governance function by addressing the following:

1. A written status update is not regularly provided to the Risk & Audit Committee on the progress of implementation of all prior internal audit recommendations.

In 2014, the Internal Audit Department (IA) began to provide an update at each of the quarterly Risk & Audit Committee meetings. The IA updates are to include a review of completed audits, audits in progress, pending audits, and other relevant risk and internal audit updates, including the progress in implementing select internal audit recommendations. Documentation was provided by the Peoples Companies in regards to the IA updates for several of the Risk & Audit Committee meetings. The Peoples Fleet Maintenance and Fuel Cards internal audit, completed on October 31, 2014, reviewed a number of issues and contained a total of nine recommendations as follows:

- Fleet Maintenance (five recommendations)
- Preventive Maintenance Program (two recommendations)
- Vehicle Acquisitions and Dispositions (no recommendations)
- Vehicle Eligibility Pool Vehicles (one recommendation)
- Fuel Cards (one recommendation).

Once presented with the initial findings however, updates regarding implementation were not routinely provided by IA to the Risk & Audit Committee. It is a common practice for a company's internal audit department to provide a written status report to the audit committee in regards to progress on the implementation of prior internal audit recommendations. The written status report should contain all prior IA recommendations until implementation of each recommendation is complete. The Peoples Companies indicated that the IA updates include select internal audit

recommendation implementation updates. However, implementation updates from the Peoples Fleet Maintenance and Fuel Cards internal audit were, apparently, not thoroughly discussed at the IA update provided beyond the November 2014 Risk & Audit Committee meeting. As a result of partial reporting on correction efforts, the members of the Risk & Audit Committee may not be adequately informed in regards to the status of implementation of IA recommendations and unable to fulfill their duties as a Risk & Audit Committee member.

2. Peoples Gas current and proposed reporting relationship for the head of the Internal Audit Department may hinder the Internal Audit function's independence.

The Risk and Internal Audit Charter indicates that the head of the Internal Audit Department (the Manager, Risk & Internal Audit) reports administratively and functionally to the Vice President and Treasurer, with unrestricted access to the President and CEO and to the Chairman of the Risk and Audit Committee. The Risk and Audit Committee of the Board of Directors assists the Board of Directors in fulfilling its responsibilities with regard to its oversight of the performance of the Company's internal audit function. This includes:

- Reviewing and approving the Internal Audit Charter, annual Audit Plan and ongoing activities.
- Reviewing Internal Audit's reports on significant findings and recommendations on internal control.
- Monitoring Management's response to reviews and recommendations of the internal auditors regarding internal control systems and procedures.

Peoples Gas has proposed a new organization structure to go into effect in April 2016 in which the Director, Internal Audit (previously the Manager, Risk & Internal Audit) would report to the Senior Vice President & Chief Financial Officer (CFO) (previously the Vice President and Treasurer).

Changes in reporting relationships stemming from the Sarbanes-Oxley Act of 2002, the U.S. Securities and Exchange Commission, and the New York Stock Exchange Rules (SOX/SEC/NYSE rules) have been established by corporations to emphasize the importance of establishing and maintaining Internal Audit's independence. As a result, the Executive Director of Internal Audits is required by SOX/SEC/NYSE to report functionally to the Audit Committee; however, the rules do not provide guidelines regarding to whom the Executive Director of Internal Audits should report on administrative matters. However, according to a February 2013 Journal of Accountancy article, the Board of Governors of the Federal Reserve System (Federal Reserve) issued a January 2013 Supplemental Policy Statement (2013 Supplemental Policy Statement) as a result of the 2008 financial crisis on the 2003 Policy Statement on the Internal Audit Function and its Outsourcing in order to promote objectivity in the internal audit function. The 2013 Supplemental Policy Statement states in part:

"Internal audit is an independent function that supports the organization's business objectives and evaluates the effectiveness of risk management, control, and governance processes. The 2003 Policy Statement addressed the structure of an internal audit function, noting that it should be positioned so that an institution's board of directors has confidence that the internal audit function can be impartial and not unduly influenced by managers of day-to-day operations. Thus, the member of management responsible for the internal audit function should have no responsibility for operating the system of internal control and should report functionally to the audit committee. A reporting arrangement may be used in which the Chief Audit Executive (CAE) is functionally accountable and reports directly to the audit committee on internal audit matters (that is, the audit plan, audit findings, and the CAE's job performance and compensation) and reports administratively to another senior member of management who is not responsible for operational activities reviewed by internal audit. When there is an administrative reporting of the CAE to another member of senior management, the objectivity of internal audit is served best when the CAE reports administratively to the chief executive officer (CEO). If the CAE reports administratively to someone other than the CEO, the audit committee should document its rationale for this reporting structure, including mitigating controls available for situations that could adversely impact the objectivity of the CAE. In such instances, the audit committee should periodically (at least annually) evaluate whether the CAE is impartial and not unduly influenced by the administrative reporting line arrangement. Further, conflicts of interest for the CAE and all other audit staff should be monitored at least annually with appropriate restrictions placed on auditing areas where conflicts may occur."

The article according to the President and CEO of the Institute of Internal Auditors (IIA) further states, although CAEs in U.S. companies typically report administratively to the Chief Financial Officer (CFO), there are inherent risks in this reporting relationship. Moreover, this reporting relationship trend over the past ten years has diminished as more CAEs have begun reporting to the CEO and in some cases administratively to the general counsel, chief risk officer or chief operating officer. The IIA President also noted that although this administrative reporting relationship is not required by IIA standards, he anticipates the CAE to CEO administrative reporting model to become more widely adopted not only in the banking industry but in other industries as well.

Consequently, the Audit Staff believes that to conform with best practices the proposed position of Director, Internal Audit should report to the CEO or other senior officer other than the CFO on administrative matters to eliminate actual or perceived ties to the Accounting and Finance organization. The Audit Staff is concerned that the

current and proposed reporting relationship creates a potential risk of undue influence, or at least the appearance thereof, over the objectivity of the Internal Audit function with respect to accounting and financial reporting matters and the scope or timing of the work efforts.

Recommendations

- 1. Provide periodic written status reports to the Risk & Audit Committee in regards to all outstanding internal audit recommendations.
- 2. Modify the proposed Internal Audit reporting structure so that the head of the Internal Audit Department reports functionally to the Risk and Audit Committee and administratively to the President & CEO.

V. AFFILIATED RELATIONSHIPS AND COST ALLOCATIONS

Background

This chapter presents the result of the Audit Staff's review of the nature and extent of transactions between Peoples Natural Gas Company LLC (Peoples Gas), Peoples Natural Gas Company LLC – Equitable Division (Equitable Division), and Peoples TWP LLC (Peoples TWP) (collectively referred to as the Peoples Companies) and their affiliates. As discussed in Chapter II – Background, Peoples Gas and the Equitable Division are wholly owned subsidiaries of PNG Companies LLC, a holding company with various regulated and non-regulated subsidiaries. PNG Companies LLC owns regulated natural gas distribution companies (NGDCs) operating in Pennsylvania, Kentucky and West Virginia in addition to its non-regulated businesses, Peoples Homeworks LLC⁴ (Peoples Homeworks) and PNG Gathering LLC⁵ (PNG Gathering). The Peoples Companies are ultimately owned by SteelRiver LDC Ventures LLC which is indirectly controlled by SteelRiver Infrastructure Partners LP (collectively referred to as SteelRiver; see Exhibit II-2 in the Background Chapter of this report for the full corporate entity chart).

Peoples Service Company LLC (PSC) provides various administrative and management services to the Peoples Companies and their affiliates in addition to receiving services from the Peoples Companies. Under the PUC approved affiliated interest agreements (AIAs) between the Peoples Companies and PSC, PSC also acts as the counter-party in the provision of such services between the Peoples Companies and all of their affiliates. See Finding and Conclusion No. 3 in this chapter for more information about these AIAs. An illustration of the flow of charges between PSC and its affiliates is displayed in Exhibit V-1.

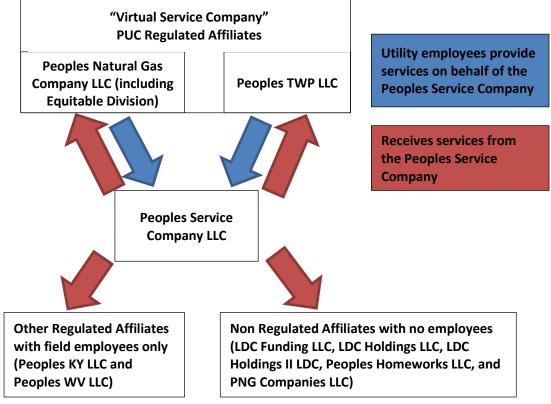
Transactions between the Peoples Companies and their affiliates are governed by various affiliated interest agreements which have been filed with and either approved or are pending approval by the Pennsylvania Public Utility Commission (PUC or Commission):

- Financing Agreements between Peoples Gas and PNG Companies LLC for multiple Intercompany Promissory Notes.
- Service Agreements between the Peoples Companies and PSC (included transitional provisions to allow the Peoples Companies to provide services on behalf of PSC to other affiliates thus the use of the term "Virtual Service Company" in Exhibit V-1).
- Operational Services Agreement between the Peoples Companies and PNG Gathering for the sharing of personnel as needed in an emergency.

⁴ Peoples Homeworks LLC offers various heating and cooling protection programs, line protection programs and restoration programs within Pennsylvania.

⁵ PNG Gathering LLC is a Delaware company that owns the Goodwin and Tombaugh gathering pipeline systems located in Greene and Washington counties that aggregate producer supplies and deliver gas to Equitable Division distribution pipelines that serve approximately 1,500 Equitable Division field line customers.

Exhibit V – 1 Peoples Companies Illustration of the Flow of Charges to and from Peoples Service Company LLC As of April 18, 2016



Source: Interview AI-1 and Auditor Analysis

- Synergy Fee Agreement between Peoples Gas and Peoples TWP for compensation when one company provides service lines to a customer of the other company.
- Billing Services Agreement⁶ for billing services provided by Peoples Gas and Peoples TWP to Peoples Homeworks.

According to the established AIAs, transactions between the Peoples Companies and their affiliates are charged at fully loaded cost for any services provided on behalf of PSC. Typically, whenever an employee is performing work for the benefit of a particular affiliate, the affiliate is directly charged for the service. Whenever a cost of providing a particular good and/or service cannot be directly attributed to a single affiliate, the cost is allocated across all affiliates benefiting from the service via a cost causative allocation factor. Additional discussion of PSC AIAs is presented in Finding and Conclusion No. 3 of this Chapter. A review of the affiliated charges to and from each of the Peoples Companies is shown in Exhibits V-2 through V-7. The review of the affiliated

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⁶ This agreement was filed with the PUC on January 29th, 2015 and remained pending as of March 31st, 2016.

transactions for Peoples Gas and Peoples TWP was for the period 2012 through 2015, while the affiliated transactions for the Equitable Division was from 2013 (when it became a SteelRiver asset) to 2015.

Exhibit V – 2
Peoples Natural Gas Company LLC
Summary of Transactions to Affiliates
For the Years 2012 through 2015

Administrative and Consul Comises	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Administrative and General Services Peoples Gas KY LLC Peoples Gas WV LLC		•	•	\$1,321 \$4,311
Peoples Service Company LLC Peoples TWP LLC PNG Gathering LLC	\$2,104,661	\$3,496,944 \$383,547 \$3,910	\$2,465,283 \$179,598 \$341,238	\$1,614,624 \$1,853,447 \$453,596
Totals	\$2,104,661	\$3,884,401	\$2,986,119	\$3,927,299
Return of Deposit PA Gas Marketing LLC		-\$46,000		
Asset Sale Peoples TWP LLC			\$1,452,616	
Gas Sales & Transportation PA Gas Marketing LLC			\$5,279	
Implementation of Service Company Peoples Service Company LLC				\$1,246,417
Pooling Services PA Gas Marketing LLC	\$11,151	\$11,221		
Storage Services Rager Mountain Storage Company LLC	\$1,546,968	\$1,616,066		
Materials Sold Peoples TWP LLC				\$36,504
Totals	\$3,662,780	\$5,465,688	\$4,444,014	\$5,210,220

Note: Data as of year-end, December 31 of each year

Source: Data Request Al-4 and Auditor Analysis

Exhibit V – 3
Peoples Natural Gas Company LLC
Summary of Transactions from Affiliates
For the Years 2012 through 2015

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Administrative and General Services				
Peoples Service Company LLC	\$237,819	\$538,674	\$5,801,632	\$7,617,979
Peoples TWP LLC		-\$11,618	\$132,944	\$1,677,607
Totals	\$237,819	\$527,056	\$5,934,576	\$9,295,586
Interest expense*				
PNG Companies LLC	\$20,636,641	\$21,337,264	\$19,509,256	\$16,670,159
Buy back				
PA Gas Marketing LLC		\$378		
Materials Purchased				
Peoples TWP LLC				\$26,013
Gas Transportation Services				
Peoples TWP LLC				\$33,145
Totals	\$20,874,460	\$21,864,698	\$25,443,832	\$26,024,903
·	·		·	<u>-</u>

^{*}This interest expense is a result of PNG Companies holding the debt for Peoples Natural Gas Company. Note: Data as of year-end, December 31 of each year

Source: Data Request Al-4 and Auditor Analysis

Exhibit V – 4
Peoples Natural Gas Company LLC - Equitable Division
Summary of Transactions to Affiliates
For the Years 2013 through 2015

Cook Collections	<u>2013</u>	<u>2014</u>	<u>2015</u>
Cash Collections Peoples Homeworks LLC PNG Gathering LLC	\$129,242	\$3,590,923 \$23.864	\$3,570,507 \$90,608
Totals	\$129,242	\$3,614,787	\$3,661,115
Services Rendered			
Peoples Gas KY LLC		\$5,996	\$2,641
Peoples Gas WV LLC		\$19,766	\$9,522
Peoples Homeworks LLC	\$5,373	\$114,158	\$278,441
Peoples TWP LLC			\$68,209
PNG Gathering LLC		\$405,923	\$114,750
Totals	\$5,373	\$545,843	\$473,563
Gas Sales/Purchases/ Convenience Payments			
Peoples Gas WV LLC		\$302,103	\$616,055
Totals	\$134,615	\$4,462,733	\$4,750,733

Note: Data as of year-end, December 31 of each year.

Source: Data Request Al-4 and Auditor Analysis

Exhibit V – 5 Peoples Natural Gas Company LLC - Equitable Division Summary of Transactions from Affiliates For the Years 2013 through 2015

	<u> 2013</u>	<u>2014</u>	<u> 2015</u>
Gas Purchases PA Gas Marketing LLC		\$1,440,078	
Gas Transportation Service Peoples TWP LLC		\$1,234,577	\$1,705,227
Interest Expense* PNG Companies LLC		\$14,353,593	\$14,476,659
Services Received Peoples Service Company LLC Peoples TWP LLC			\$3,006,430 \$52,668
Totals	\$0	\$0	\$3,059,098
Totals	\$0	\$17,028,248	\$19,240,984

^{*}This interest expense is a result of PNG Companies holding the debt for the Equitable Division.

Note: Data as of year-end, December 31 of each year.

Source: Data Request AI-4 and Auditor Analysis

Exhibit V – 6 **Peoples TWP LLC** Summary of Transactions to Affiliates For the Years 2012 through 2015

<u>2012</u>	<u>2013</u>	<u>2014</u>	<u> 2015</u>
. ,	·		\$6,995
\$222,162		\$1,377,887	\$1,358,680
	\$159,596		
\$64,545	·		
			\$1,730,276
\$339,936	\$1,275,711	\$1,522,639	\$3,095,951
	¢42.412.056	\$464 634	\$295,880
	φ42,412,000	φ401,034	φ295,000
		\$214,288	
		04 004 577	#4 705 007
		\$1,234,577	\$1,705,227
			\$77,220
			* · · · ,===
			\$26,013
			\$408,857
			Ψ-100,001
\$339,936	\$43,687,767	\$3,433,138	\$5,609,148
	\$50,532 \$222,162 \$2,697 \$64,545 \$339,936	\$50,474 \$50,532 \$422,811 \$222,162 \$159,596 \$2,697 \$64,545 \$167,889 -\$11,618 \$339,936 \$1,275,711 \$42,412,056	\$50,474 \$50,532 \$422,811 \$11,808 \$222,162 \$486,559 \$1,377,887 \$159,596 \$2,697 \$64,545 \$167,889 \$11,618 \$132,944 \$339,936 \$1,275,711 \$1,522,639 \$42,412,056 \$461,634 \$214,288 \$1,234,577

Note: Data as of year-end, December 31 of each year Source: Data Request Al-6 and Auditor Analysis

Exhibit V – 7 Peoples TWP LLC Summary of Transactions from Affiliates For the Years 2012 through 2015

Complete Resolved	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Services Received Peoples Service Company LLC Peoples Natural Gas Company LLC	\$1,997,269	\$3,217,850 \$383,547	\$2,571,298 \$179,598	\$2,322,968 \$1,869,275
Totals	\$1,997,269	\$3,601,397	\$2,750,896	\$4,192,243
Gas Purchases PA Gas Marketing LLC	\$4,203,635			
Gas Sales/Cash Outs/Compressor Fees PA Gas Marketing LLC		\$2,100,841		
Asset Purchase Peoples Natural Gas Company LLC			\$1,452,616	
Materials Purchased Peoples Natural Gas Company LLC				\$36,504
Totals	\$6,200,904	\$5,702,238	\$4,203,512	\$4,228,747

Note: Data as of year-end, December 31 of each year

Source: Data Request Al-6 and Auditor Analysis

The following are the Peoples Companies' explanations for the more significant differences in charges to/from affiliates from year to year:

- A decrease in cash collections activity by Peoples TWP due to PA Gas
 Marketing LLC (PAGM) ending their Energy Choice supplier related activity
 effective with the date of the Equitable Division acquisition on December 16,
 2013. PAGM surrendered its natural gas supplier license on July 9, 2014 and
 ended its warranty program contract on September 1, 2015.⁷
- Peoples TWP was converted into SAP on January 1, 2013. Having a common accounts payable system provided greater opportunity to leverage convenience payment functionality.
- Peoples TWP was converted into SAP Customer Relationship and Billing (CR&B) for customer billing on January 1, 2014.
- All customer service and billing personnel were moved to PSC in May 2015 in anticipation of the moving of the Equitable Division into CR&B which occurred in July 2015.

⁷ As shown in Exhibit V-6.

⁸ As shown in Exhibit V-8.

- Operations began implementing its redistricting plan in July 2015 and moved all field operations onto common platforms for Geographic Information System, field order processing, etc.
- An increase in services provided from Peoples TWP to PSC for accounts payable, gas supply, and operations reflected the movement towards greater integration of the entire organization under LDC Funding LLC. Also, Peoples TWP's conversion into the same accounting system in SAP as Peoples Gas in 2013 created the opportunity for cross-support to occur for accounts payable functions.9
- An increase in gas sales/purchases/convenience payments are due to the former Equitable Division being split into separate legal entities by state after the acquisition by SteelRiver. Prior to the split, the Equitable Division had purchase contracts that covered both Pennsylvania and West Virginia under a single entity. Most contracts have now been revised to directly bill the new separate legal entities. The activity in 2015 represents the billing of Peoples Gas WV LLC for its share of invoices for gathering services. 10
- An increase in gas transportation services received by the Equitable Division and provided by Peoples TWP as a direct result of the purchase of the Equitable Division and only a change in classification. Under the legacy contract provisions, the Equitable Division and Peoples TWP received/provided the same transportation services (transportation of local purchases on Peoples TWP's lines delivered to the Equitable Division), but once the Peoples Companies became affiliated, the activity was presented as an affiliated transaction. 11

Also transacted between the Peoples Companies and their affiliates are convenience payments. Convenience payments are utilized when a third-party vendor does not separately bill each affiliate and instead provides a consolidated invoice for multiple affiliates. The billed company will pay the invoice but direct charge or allocate costs to the other affiliates who received services from the third-party vendor based on the methodologies approved within the AIAs. The Peoples Companies have been requesting these third-party vendors to separate the bills; however, as shown within Exhibit V-8, the convenience payments have been ongoing. The Peoples Companies stated throughout 2013 and early 2014, many acquisition related expenses such as debt issuance costs and legal fees were paid directly by PNG Companies LLC or LDC Holdings LLC and subsequently reimbursed by Peoples Gas.

Ring-fencing is the term used to describe the actions and effort (legal, structural, or behavioral) taken to financially insulate a regulated utility from the potentially riskier activities of its unregulated affiliates. The purpose is to ensure that the financial stability of the utility and the reliability of its services are not adversely affected by the actions or

⁹ As shown in Exhibit V-6. ¹⁰ As shown in Exhibit V-4.

¹¹ As shown in Exhibit V-5.

Exhibit V – 8 Peoples Companies Summary of Convenience Payments to/from Affiliates For the Years 2012 through 2015

	2012	2013	2014	2015					
Peoples Natural Gas Com	Peoples Natural Gas Company LLC - Convenience Payments to affiliates:								
LDC Funding	\$124,585	\$11,674	\$62,951	\$36,666					
LDC Holdings I	\$79,240	\$49,801	\$62,604	\$48,424					
PA Gas Marketing LLC	Ψ1 3,240	Ψ-3,001	\$941	\$1,330					
Peoples Service Company LLC		\$266,242	\$22,424	\$653,993					
Peoples TWP LLC		\$263,021		· ·					
	¢4.407.007		\$4,636,766	\$6,481,062					
PNG Companies LLC	\$4,427,997	\$1,646,418	\$426,960	\$47,040					
PNG Gathering LLC	004.040	477 000		\$667					
Rager Mountain Storage Company LLC	\$91,913	\$77,620		# 400					
LDC Holdings II LLC		\$504	^	\$102					
Totals	\$4,723,734	\$2,315,282	\$5,212,647	\$7,269,283					
Peoples Natural Gas Compa	any LLC - Conver	nience Payments							
LDC Funding		.	\$9,428						
LDC Holdings I		\$257,495							
PA Gas Marketing LLC			\$470						
Peoples TWP LLC		\$520	\$70,120	\$48,699					
PNG Companies LLC		\$1,612,176	\$418,740	\$309,100					
Totals	\$0	\$1,870,191	\$498,758	\$357,799					
Equitable Division Peoples Gas KY LLC Peoples Gas WV LLC Peoples Homeworks LLC	- Convenience P	881,718 \$81,546 \$214,546	\$350,801 \$1,599,262 \$204,203	\$524,449 \$1,189,893 \$56,605					
PNG Gathering LLC			\$508						
Totals	<u>\$0</u>	\$296,264	\$2,154,775	\$1,770,946					
· · · · · · · · · · · · · · · · · · ·	Convenience Pay			•					
LDC Funding		\$23,071	\$77	\$41,650					
LDC Holdings I		\$16,931							
PA Gas Marketing LLC		\$614,524	\$574,571	\$607					
Peoples Service Company LLC			\$124,469	\$15,577					
LDC Holdings II	\$39,729	\$157,306	\$3,679	\$48,681					
Peoples Natural Gas Company LLC		\$520	\$70,120	\$31,622					
Totals	\$39,729	\$812,352	\$772,916	\$138,136					
Peoples TWP - C	Convenience Payn	\$266,242	ates: \$11,424						
LDC Holdings II		\$109,365	# 4.000 = 00	40.500 446					
Peoples Natural Gas Company LLC		\$263,021	\$4,636,766	\$6,533,443					
Totals	\$0	\$638,629	\$4,648,191	\$6,533,443					

Note: Data as of year-end, December 31 of each year Source: Data Requests Al-4, Al-6 and Auditor Analysis

financial condition of its unregulated affiliates. During the acquisition of Peoples Gas by SteelRiver numerous guidelines regarding ring-fencing were agreed to:

- Peoples Gas or its parent LDC Holdings shall issue and maintain separately issued debt held by investors not affiliated with SteelRiver Infrastructure Fund North America LP unless approved by the Commission.
- Unless approved by the Commission Peoples Gas shall not: guarantee the
 debt or credit instruments of any affiliate not regulated by the PUC, mortgage
 utility assets on behalf of other affiliates or loan money or extend credit to
 other affiliates for a loan term greater than one year.

With the acquisition of Peoples TWP, the above ring fencing conditions were also applied to Peoples TWP and its parent LDC Holdings II. Additional guidelines regarding ring-fencing commitments were added:

- Maintain separate financial statements reflecting Peoples TWP's own assets and liabilities.
- Peoples TWP will attempt to obtain its own credit rating in conjunction with issuance of new debt if it concludes that doing so will reduce the overall cost of debt.
- Peoples TWP's dividends to LDC Holdings II shall be limited to no more than 100% of retained earnings.

Similarly, during the acquisition of the Equitable Division, Peoples Gas agreed to not do the following, except as approved by the Commission:

- Guarantee the debt or credit instruments of any affiliate not regulated by the PUC.
- Mortgage utility assets on behalf of other affiliates.
- Loan money or extend credit to other affiliates for a loan term greater than one year.

The Peoples Companies have established policies applicable to all employees entitled *Standards of Conduct for Interactions with Natural Gas Suppliers* (NGS) in order to comply with the Standards of Conduct adopted by the PUC at 52 Pa. Code § 62.142. The Standards of Conduct policy are intended to ensure no preferential treatment is given to any NGS, protect the confidentiality of customer information collected and prohibit cross-subsidization of PAGM (which is no longer active as of September 2015). When PAGM was an affiliate NGS, training had been provided to the following departments: Gas Supply, Transportation Services, Sales, and Rates and Regulatory.

As of April 2016, formal training is only provided to Customer Service Center employees during new hire training.

Findings and Conclusions

Our examination of the Affiliated Relationships and Cost Allocations function focused primarily on a review of contracts and agreements governing transactions among affiliates, cost allocation methodologies, training efforts, compliance with existing allocation policies and practices, a review of ring-fencing efforts, competitive safeguards, etc. Based on our review, the Peoples Companies should initiate or devote additional efforts to improving the efficiency and/or effectiveness of their cost allocation processes by addressing the following:

1. The Peoples Companies do not maintain a cost allocation manual (CAM) or other comprehensive document compiling all relevant documents and operating practices related to cost allocations.

In accordance with 66 Pa. C.S. §2102 and discussed within the Background section of this Chapter, several affiliated interest agreements (AIAs) between the Peoples Companies and their affiliates have been filed with and approved or are pending approval by the Commission that address the allocation factors utilized within their intercompany transactions. The Peoples Companies maintain a spreadsheet that show the percentages for each affiliate that receives a specific service for the allocation factors described within the PSC AIAs. Additionally, instructions have been provided via e-mail to employees in various departments instructing them to charge their time when working on multiple companies by direct charging whenever possible and then using the aforementioned allocations if direct charging is not possible. However, none of these documents are compiled or discussed in a CAM.

The National Association of Regulatory Utility Commissioners (NARUC) Guidelines for Cost Allocations and Affiliate Transactions (Guidelines) are intended to provide guidance to jurisdictional regulatory authorities and regulated utilities and their affiliates in the development of procedures and recording of transactions for services and products between a regulated entity and its affiliates. The prevailing premise of the NARUC Guidelines is that allocation methods should not result in subsidization of non-regulated services or products by regulated entities unless authorized by the jurisdictional regulatory authority. The NARUC Guidelines state, in part, that:

Each entity that provides both regulated and non-regulated services or products should maintain a cost allocation manual (CAM) or its equivalent and notify the jurisdictional regulatory authorities of the CAM's existence. At a minimum, the CAM should contain the following:

 An organization chart of the holding company, depicting all affiliates, and regulated entities.

- A description of all assets, services and products provided to and from the regulated entity and each of its affiliates.
- A description of all assets, services and products provided by the regulated entity to non-affiliates.
- A description of the cost allocators and methods used by the regulated entity and the cost allocators and methods used by its affiliates related to the regulated services and products provided to the regulated entity.

In order to ensure consistency of the application of allocation factors, the CAM should include the following items in addition to those items listed above: identification of the departments/personnel responsible for collecting supporting data, calculating factors, approving allocation updates, and the entry of the factors; frequency of the updates to allocation factors; current regulatory documents such as affiliated interest agreements and codes of conduct; and a description of the process utilized in resolving rounding errors and differences within the allocation calculations. Without a formal centralized document detailing the Peoples Companies' policies and procedures related to cost allocations between affiliates, it is possible that current and future employees could be inconsistent in using the allocation methodologies for affiliate transactions. In addition, the chance of cross-subsidization of non-regulated services or products by the Peoples Companies will be minimized if a detailed CAM is developed and consistently applied.

In an organizational structure in which common services are provided to multiple regulated and/or unregulated affiliates, costs should be distributed to the company receiving the benefit from the work performed. Where possible, personnel should track and charge their time and expenses directly to the specific affiliate when the service provided relates exclusively to that affiliate. When the service provided relates to more than one affiliated company or cannot be identified as benefiting a single affiliate or group of affiliates, personnel should allocate their time and expenses only to the affiliates benefiting from the service, based on approved methodology. The accuracy of time and expense coding by employees, and approval by their direct line supervisors, plays a significant role in maintaining the integrity of accounting records and intercompany charges. As a result, all employees should periodically (or more frequently, as changes occur) be required to participate in training on the proper accounting for time and expense entries.

2. Internal audits of affiliate transactions and cost allocations for shared services are not being performed.

The Peoples Companies' Internal Audit (IA) function is performed by Peoples Gas employees on behalf of PSC. The IA Department has not conducted an internal audit of intercompany transactions because an IA prioritized risk assessment of the Peoples Companies conducted in 2015 and the years prior have not indicated a need to audit this area.

According to NARUC's Guidelines for Cost Allocations and Affiliate Transactions, each regulated entity's internal auditors should periodically review the cost allocation policy and process. Internal audits should assess both the appropriateness of the current policies and procedures and their application. Periodic internal review of affiliate transactions and cost allocations will aid in assuring that the Peoples Companies are operating in ways reflective of the approved AIAs and that policies and procedures are consistently followed by employees. Since affiliate transactions are eliminated for consolidated reporting purposes when the external audit firm conducts its annual audit, the accuracy of cost allocations among affiliates are often not identified as a material risk. Nonetheless cost allocations among affiliates can have a sizeable impact for regulatory purposes due to the potential for cross subsidization of non-regulated affiliates and among regulated affiliates and their customers if cost allocations are applied inaccurately or inconsistently.

An internal audit of affiliate transactions and cost allocations should be incorporated into the IA Department's audit plans to be performed at a minimum of every three years. Testing and evaluation of intercompany transactions are necessary in order to verify that the Peoples Companies' policies and procedures are being properly executed. Additionally, these reviews will help to verify that the Peoples Companies are being properly charged for goods and services received as well as properly charging for goods and services provided, which will ultimately validate the costs charged to ratepayers.

During our field work, the Audit Staff were provided with an internal audit risk assessment for 2016 that did indicate a need for an audit of intercompany transactions and IA management indicated that an internal audit was scheduled to occur during the second quarter of 2016.

3. The affiliate interest agreements in place between the Peoples Companies and their affiliates do not accurately reflect the long-term organizational design and arrangement in which services are being performed.

After Peoples TWP was acquired in May 2011, an analysis was conducted to determine the potential benefits of forming a service company that would combine the "back office" functions of each company in order to more efficiently serve the companies. In 2012, the decision was made to move forward with the formation of PSC by moving employees from Peoples Gas and Peoples TWP into PSC. In June 2012, AIAs were approved by the PUC that indicated a two-phase plan featuring a phase one transition period¹² where PSC functions would be initially provided on behalf of Peoples and Peoples TWP with the expenses for these services being passed through PSC. Phase two would occur when all functions were fully moved into PSC and services would no longer be provided by Peoples Gas and Peoples TWP on behalf of PSC.

Subsequently in December 2013, Peoples Gas acquired the Equitable Gas Company (now referred to as the Peoples Gas - Equitable Division) and the transition of

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¹² During discussions with the PUC the transition period was anticipated to last approximately two years.

employees to PSC was temporarily put on hold. One of the primary hindrances to moving the functions from Peoples Gas and Peoples TWP to PSC is Information Technology (IT) system conversion. In other words, the fact that the companies were not all operating on the same IT systems such as billing and customer service systems was the primary roadblock to a swift transition.

In May 2015, the Equitable Division was converted to the same billing and customer service system as Peoples Gas and Peoples TWP, which enabled the first function to be moved to PSC – the Customer Service Call Center. During this transition the Peoples Companies realized the extent of the time and expense required to move employees into PSC. As a result, other options began to be considered such as:

- Transition all employees over to PSC all at once rather than by function as IT systems are converted.
- Keep the functions within their respective companies and not fully transition to PSC.
- Merge Peoples TWP into Peoples Gas as a separate division. Peoples Gas could then serve the role as a service company by housing all employees that provide the service company functions.

Upon reviewing intercompany transactions during our field work, the Audit Staff noted charges and invoices for services directly between the Peoples Companies and affiliates (e.g., Peoples WV and Peoples KY) that were not specifically identified in the Commission approved service company AIAs between the Peoples Companies and PSC. Management asserted that these transactions are permitted under the AIAs in place between each of the affiliates and PSC. However, the wording in the AIAs states that the transactions would be charged through PSC.

The Audit Staff is not taking issue with the nature of or valuation of the charges themselves but rather in terms of how the services and charges are being accounted for relative to the approved AIAs. Even when the services provided by the Peoples Companies on behalf of PSC are flowing through invoices as prescribed in the AIA, the charges appear as a lump sum making it extremely difficult for the affiliate that received the service to verify the accuracy of the individual charges let alone determine the nature of charges.

As specified at 66 Pa. C.S. § 2102 up-to-date AIAs should be on file with the PUC so that the PUC can ensure the reasonableness of these agreements. The Audit Staff understands that the Peoples Companies intended to move from phase one to phase two as prescribed in the service company AIAs; however, the acquisition of the Equitable Division and subsequent realization of the time and expense required to move the first department led to the indefinite postponement of fully moving employees from the Peoples Companies to PSC. As of April 18, 2016, the only service company function truly being performed by PSC employees is certain Customer Service activities (see Chapter VIII – Customer Service for more details). The remainder of the administrative and management services is being provided by employees of the Peoples Companies on behalf of PSC. Therefore, since the Peoples Companies have

not committed to completing the transition to move the remaining employees to PSC, it appears imprudent for the PUC to allow the Peoples Companies to transact with multiple affiliates which are not explicitly identified in any approved AIA under the guise of acting on behalf of a service company that might not become fully realized.

Recommendations

- 1. Develop a cost allocation manual, distribute it to appropriate employees, and provide periodic training on proper time allocation and expense to all Peoples Companies' employees, in order to ensure consistent application of cost allocation policies and procedures among all affiliates.
- 2. Conduct periodic internal audits of affiliate transactions and the cost allocations process.
- 3. File revised affiliated interest agreements that accurately describe the transactions and cost allocation of services provided between the Peoples Companies and their affiliates.

VI. FINANCIAL MANAGEMENT

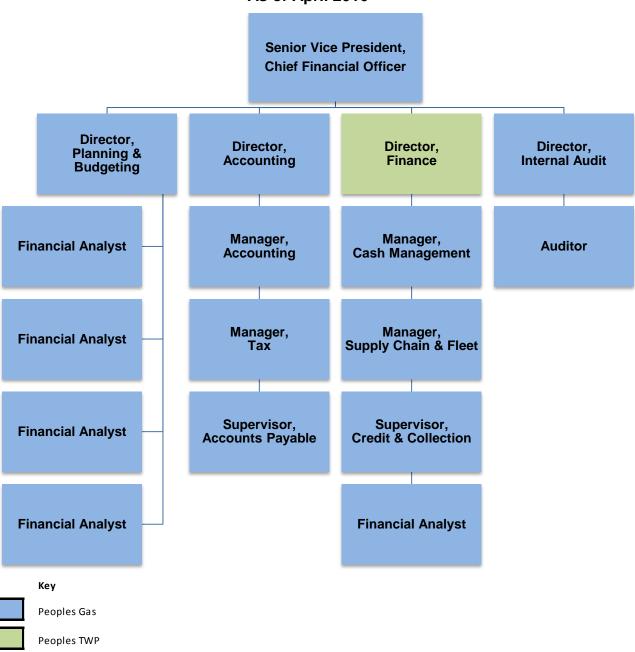
Background

As discussed in Chapter II – Background, Peoples Service Company LLC (PSC) provides services for Peoples Natural Gas Company LLC (Peoples Gas), Peoples Natural Gas Company LLC – Equitable Division (Equitable Division), and Peoples TWP LLC (Peoples TWP), collectively called the Peoples Companies, which is indirectly controlled by SteelRiver Infrastructure Partners LP (referred to as SteelRiver, see Chapter II - Background). In the case of the Financial Management function, Peoples Gas and Peoples TWP provide strategic direction, leadership and oversight of planning and budgeting, accounting, finance, and internal audit on behalf of PSC for the Peoples Companies and other related affiliates.

As shown in Exhibit VI-1, the Senior Vice President, Chief Financial Officer (CFO) is responsible for overseeing the Financial Management function at the Peoples Companies. There are four Directors who report directly to the CFO. The Director, Planning and Budgeting is responsible for leading the planning, budgeting, and investment analysis processes including financial budgeting, goal setting, operations and maintenance (O&M)/capital budgeting, business and strategic planning, management-level financial reporting and investment evaluations. The Director, Accounting is responsible for the maintenance and reconciliation of the general ledger accounts and financial statements, identifying, reviewing, researching, and advising management of emerging accounting and financial reporting issues, fixed asset tracking, and directing the tax function, including the preparation of all tax returns, tax consulting services, and establishing tax strategy. The Director, Finance is responsible for financing activities, cash management, supply chain and fleet, and credit and collection. The Director, Internal Audit is responsible for planning, implementing, and overseeing the Enterprise Risk Management (ERM) and internal audit programs to ensure that, respectively, the ERM identifies and addresses risks to the Peoples Companies and the system of internal controls and operating practices adequately safeguards assets.

On a daily basis, the cash activity for Peoples Gas, including the Equitable Division, is automatically funded by PNG Companies LLC. A cash shortfall triggers a borrowing of short-term funds and a cash surplus triggers a pay down of any outstanding debt balances. Peoples TWP borrows short-term funds under its Credit Agreement with a consortium of banks. Peoples Gas secures long-term borrowings through Intercompany Promissory Notes with PNG Companies LLC. Long-term borrowings are targeted at approximately 50% of financing needs (i.e., approximately 50% debt and 50% equity). Peoples TWP has secured long-term debt financing through various private note offerings. Long-term borrowings are also targeted at approximately 50% of financing needs. Short-term and long-term financing is obtained through use of an agent (e.g., a bank) in the third-party capital markets. Private notes (i.e., corporate bonds) are issued to various institutions via an auction process. Bids from the various institutions are based on a Company's credit rating (e.g., BBB- or an

Exhibit VI – 1
Peoples Companies
Chief Financial Officer Organization
As of April 2016



Source: April 2016 update to Data Request No. EM-01

investment grade rating), allowing the bids to be compared. Bids for long-term financing are based on the U.S. Treasury interest rate for a specified time period plus a margin of, for example, 150 basis points. Bids for short-term financing are based on the London Interbank Offered Rate (LIBOR) plus a margin.

The 2016 calendar year expense budget was built based on zero-based budget methodology, whereby all expenses must be justified for each new period. With zero-based budgeting, every function within an organization is analyzed for its needs and costs. The Financial Budget Process begins in April and receives Board approval in November or December. Inputs to the Financial Budget include the expense budget, capital budget, revenue budget, depreciation, and financing/interest requirements. Monthly and quarterly monitoring of the Financial Budget occurs. Variances are reviewed monthly; the Board receives variance reports at the quarterly Board meetings.

As discussed in Chapter X – Human Resources, there is one frozen defined benefit plan for certain union employees of Peoples TWP. In addition, there are two defined benefit plans that require funding obligations for retired employees of Peoples Gas. As such, each of these pension plans has funding requirements that the Peoples Companies must maintain. The Pension Protection Act of 2006 (PPA) requires companies with under-funded pensions to pay additional premiums to the Pension Benefit Guaranty Corporation and also eliminates loopholes that allowed under-funded pensions to miss pension payments. The PPA also requires that pension plans provide more accurate assessments of their pension obligations. The PPA and Section 436 of the Internal Revenue Code require the calculation of a funding ratio each plan year known as the Adjusted Funding Target Attainment Percentage (AFTAP). This percentage is used to determine if the plan is subject to limitations on plan amendments, lump sum distributions and/or benefit accruals. The AFTAP for each of the qualified pension plans as of January 1, 2015, is shown in Exhibit VI-2. Based on these reported AFTAP percentages, there are no such restrictions applicable to any of the Peoples Companies qualified pension plans.

Exhibit VI – 2 Peoples Companies Qualified Pension Plans Adjusted Funding Target Attainment Percentage As of January 1, 2015

	Adjusted Funding Target Attainment
Qualified Pension Plan	Percentage
PNG Companies LLC Pension Plan	117.86%
PNG Companies LLC Defined Benefit Plan for Former Employees of Equitable Gas	104.14%
T.W. Phillips Gas and Oil Pension Plan for Hourly-Paid Employees of T.W. Phillips Gas and Oil Company	106.89%

Source: Data Request No. FM-55

Findings and Conclusions

Our examination of the Financial Management function focused primarily on a review of the accounting policies and procedures, the capital and operating budget processes, budget variance tracking and reporting, short and long-term financing activities, cash collection and disbursement, dividend policies, and the internal audit process. Based on our review, the Peoples Companies should initiate or devote additional efforts to improving the efficiency and/or effectiveness of its financial management function by addressing the following:

1. Written dividend policies do not exist for both Peoples Natural Gas and Peoples TWP.

Although there are no formal written dividend policies for Peoples Natural Gas and Peoples TWP, the Peoples Companies follow comprehensive defined parameters that determine how quarterly dividends are paid. As a result of various factors, such as the seasonal nature of the business and Commission approved regulatory requirements, dividend payments are not solely based on a rigid formula such as percent of earnings, but instead consider defined parameters such as current and projected monthly cash flows, capital expenditure and other financing requirements, debt covenant requirements, and various regulatory commitments, all of which are designed to maintain a debt to equity capitalization ratio that is within required regulatory limits. Such regulatory commitments include:

- Peoples Gas' dividends to its parent, PNG Companies LLC, cannot exceed 100% of retained earnings per Settlement Agreement at Docket No. A-2008-2063737.
- Peoples TWP's dividends to its parent, LDC Holdings II, cannot exceed 100% of retained earnings per Settlement Agreement at Docket No. A-2010-2210326.
- Some of the commitments made by Peoples Gas as part of the Settlement Agreement for the acquisition of the Equitable Division at Docket No. A-2013-2353647 are as follows:
 - The capital structure of Peoples Gas will be maintained at an approximate level of 50% debt and 50% equity.
 - Peoples' dividend payments shall be limited to a level that maintains a maximum debt ratio of 55%, excluding working capital facilities, unless approved by the Commission.

An analysis of the factors above is made on a quarterly basis and a dividend payment recommendation is made to the Board of Directors that ensures compliance with all regulatory, debt agreement and other relevant requirements. The payment of quarterly dividends is then approved by the respective boards of Peoples Gas and Peoples TWP through formal board resolutions. For the period 2012 through 2015, the levels of dividend payments at Peoples Gas and Peoples TWP have been in compliance with the various Settlement Agreements.

While the Audit Staff acknowledges that the Peoples Companies have a comprehensive set of procedures designed to maintain a debt to equity ratio that is currently within required regulatory limits, establishing a written dividend policy will further refine the existing parameters and operating practices. A documented dividend policy should outline the policy's purpose and scope, identify responsibility for the policy, identify financial requirements, restrictions, and/or formulas that are used for determining annual dividend payments and indicate a maximum and target dividend payout range. A written dividend policy will provide an enhanced approach to ensuring appropriate dividends and policy are maintained between the parents and their regulated subsidiaries.

Recommendations

1. Establish a written dividend policy that documents the procedures for determining the level of dividend payments.

VII. GAS OPERATIONS

Background

Peoples Natural Gas Company LLC (Peoples Gas), Peoples Natural Gas Company LLC – Equitable Division (Equitable Division), and Peoples TWP LLC (Peoples TWP), collectively referred to as the Peoples Companies, are natural gas distribution companies (NGDCs) which are indirectly controlled by SteelRiver Infrastructure Partners LP (collectively referred to as SteelRiver). The corporate entity structure for the Peoples Companies is displayed in Exhibit II-1 of Chapter II – Background. Additionally, an overview of the histories, service territories of Peoples Gas, the Equitable Division, and Peoples TWP; and the SteelRiver acquisition of each is also reviewed in Chapter II.

The Peoples Gas Companies are operationally divided into five service regions that encompass 18 counties in Pennsylvania as seen previously in Exhibit II-2. Field employees operate from field offices and satellite centers in each service territory. The last reorganization of service territories was implemented on July 5, 2015; however, as of the end of the Audit Staff's fieldwork on April 18, 2016, the Peoples Companies were in the proposal stages of reorganizing field offices and shops (see Chapter III – Executive Management background). The Operations service territories and divisions are shown in Exhibit VII-1.

Exhibit VII – 1
Peoples Companies
Service Regions\Divisions
As of April 2016

Service Regions	Divisions
	Pitt Street (Wilkinsburg)
Pittsburgh	McKeesport
	Corliss Street (Pittsburgh)
	Greensburg
Central	Ginger Hill
	Waynesburg
	Monongahela
	Kiski
North	Valley
	Allegheny
	Armstrong
	Gibsonia
	Hopewell
West	Butler
West	Grove City
	Etna
	Mt. Nebo
	Johnstown
East	Altoona
EdSt	Indiana
	Jefferson
Causas Data Daguart	000

Source: Data Request GO-2

As shown in Exhibit VII-2, the Operations organizational structure is comprised of a Gas Operations Department, led by a Director, and a Construction and Engineering Department led by a Vice President, who both report to the Chief Executive Officer. Gas Operations is responsible for all operation and maintenance (O&M) activity related to maintaining the Peoples Companies' gas infrastructure including but not limited to leak repair, gas measurement and regulation, and compressor maintenance. Pipeline compliance activities encompass inspection and maintenance, leak survey, damage prevention and corrosion control of gas pipeline infrastructure. An Operations Manager who is employed by either Peoples Gas, Equitable Division, or Peoples TWP (please refer to the key in Exhibit VII-2) is assigned to each service territory. Under each manager are supervisors and teams of field employees, process specialists and integrity technicians which are comprised of employees from each of the Peoples Companies.

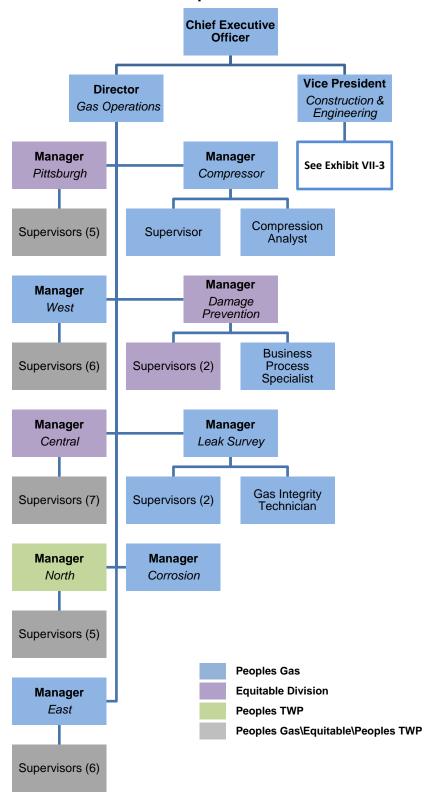
In order to ensure uniform unaccounted-for gas (UFG) reporting, the PUC adopted standard reporting requirements for UFG calculations on August 9, 2013 at 52 Pa. Code § 59.111. The standard reporting requirements also distinguish and separate the UFG values for distribution, transmission, storage and gathering losses. The Audit Staff investigated UFG calculation based upon the new standards and found that the Peoples Companies were properly calculating and including the necessary adjustments as identified in 52 Pa. Code § 59.111. Additionally, the Peoples Companies' reported UFG levels met the distribution metrics specified in 52 Pa. Code § 59.111.

Primary engineering and construction activities are the responsibility of the Vice President Construction and Engineering (C&E). As shown in Exhibit VII-3, there are six direct reports to the Vice President of C&E; the Managers of Compliance & Standards, and Demarcation as well as the Directors of Asset Management & Engineering, Restoration, and Pipeline Replacement. The responsibilities and duties of the aforementioned departments and subgroups are summarized below:

- Compliance & Standards standard operating procedures and practices, material standards, and compliance processes; liaison with the Public Utility Commission's Bureau of Investigation and Enforcement's Gas Safety Division
- Demarcation responsible for measurement & regulation procedures and practices
- Asset Management & Engineering engineering activities, pipeline design, land and right-of-way practices and capital budget oversight
- Restoration surface restoration from construction activities
- Pipeline Replacement capital work for pipeline construction including all Long Term Infrastructure Improvement Plan (LTIIP) work

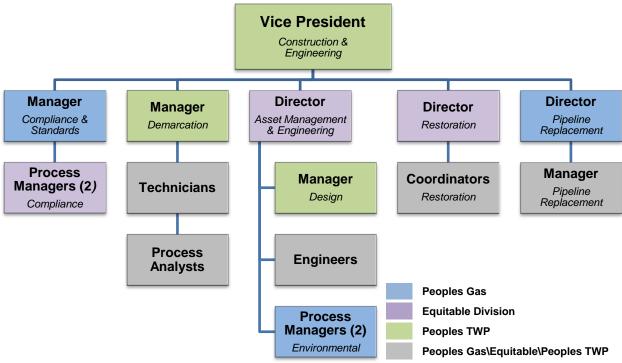
As of January 2016, the Peoples Companies were in the process of phasing out the use of contractors for performing capital work. Historically, Peoples Gas was performing approximately 20% of capital work in-house with the remainder contracted out. In recent and coming years, the Peoples Companies will experience a stable workload of capital projects due to LTIIP commitments (please see Finding VII-2). As a result, a dedicated Construction Department (Construction) headed by the Director of

Exhibit VII – 2
Peoples Companies
Operations Organization Chart
As of April 2016



Source: April 2016 update to Data Request EM-2



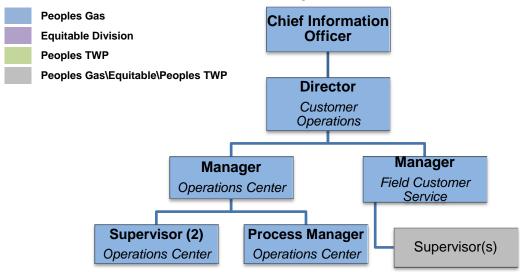


Source: April 2016 update to Data Request EM-2

Pipeline Replacement was created in January 2015. The concept of an in-house construction unit was to eliminate the dependence on and premium costs associated with using contractors while increasing pipe replacement rates and quality control. Also a dedicated in-house construction unit avoids competition with other NGDCs for the services of contractors to perform significant LTIIP work anticipated to occur in Pennsylvania.

Another department providing services for Operations-related work is Customer Operations (CO). The Director of CO reports directly to the Chief Information Officer. Reporting to the Director of CO are the Managers of the Operations Center and Field Customer Service. The Operations Center provides customer order scheduling, dispatch and after-hours emergency response calls on a 24 hour basis. Field Customer Service includes all customer service fieldwork such as leak and odor investigations, no gas or low pressure complaints, turn ons\offs, meter sets and other various customer requests. The CO organizational chart is shown in Exhibit VII-4.





Source: April 2016 update to Data Request EM-2

Findings and Conclusions

Our examination of the Peoples Companies' Gas Operations function included a review of assigned responsibilities, policies and procedures, Capital and O&M budgets and expenditures, system operations, preventative maintenance, capital planning, workforce management, emergency response, gas control, unaccounted-for-gas, safety, etc. Based on our review, the Peoples Companies should initiate or devote additional efforts to improving the efficiency and/or effectiveness of its Gas Operations by addressing the following:

1. The Peoples Companies have a high percentage of unprotected bare steel mains relative to other Pennsylvania Natural Gas Distribution Companies.

The Peoples Companies do not rank favorably relative to other Pennsylvania Natural Gas Distribution Companies (NGDCs) regarding unprotected bare steel mains as a percentage of system totals. Bare steel mains and services are highly vulnerable to corrosion which can lead to leaks, elevated unaccounted-for-gas levels, and introduce a higher probability of gas safety incidents due to pipeline failure over time. Exhibit VII-5 shows the percentage of the Peoples Companies' unprotected bare steel mains relative to other Pennsylvania NGDCs while Exhibit VII-6 shows the comparison for unprotected bare steel services. Peoples Gas and the Equitable Division have significantly reduced the amount of bare steel services in 2014 while Peoples TWP still has a relatively higher amount of bare steel services. Note that as of the end of our fieldwork (i.e., April 2016), the 2014 Department of Transportation (DOT) statistics for bare steel were the most recent available to use for comparison.

Exhibit VII – 5
Peoples Companies
Percentage of Unprotected Bare Steel Main in
Natural Gas Distribution Company Distribution Systems
For the Years 2010 through 2014

Company	2010	2011	2012	2013	2014	Compound Growth
Columbia	25.30%	23.30%	22.30%	21.20%	20.20%	-5.50%
National Fuel	18.50%	17.90%	20.50%	20.10%	19.70%	1.50%
UGI Central	16.50%	16.20%	16.00%	14.00%	13.80%	-4.40%
UGI Penn	10.60%	10.30%	10.30%	4.20%	4.30%	-20.40%
UGI Utilities	4.90%	4.60%	4.80%	4.60%	4.20%	-3.70%
Panel Average	15.20%	14.50%	14.80%	12.80%	12.40%	-4.90%
Peoples	26.90%	26.50%	25.80%	25.50%	25.20%	-1.70%
Equitable	22.40%	21.00%	20.30%	20.10%	19.40%	-3.50%
Peoples TWP	36.50%	35.40%	35.00%	30.30%	29.40%	-5.30%

Source: DOT Annual Reports

Exhibit VII – 6
Peoples Companies
Percentage of Unprotected Bare Steel Services in
Natural Gas Distribution Company Distribution Systems
For the Years 2010 through 2014

Company	2010	2011	2012	2013	2014	Compound Growth
	40.400/	45.700/	1.1.000/	4.4.400/	10.500/	4.00%
Columbia	16.10%	15.70%	14.90%	14.10%	13.50%	-4.30%
National Fuel	14.70%	14.50%	13.20%	12.60%	12.10%	-4.70%
UGI Central	0.50%	0.50%	0.50%	0.50%	0.50%	-0.60%
UGI Penn	1.00%	0.90%	0.70%	0.70%	0.70%	-6.50%
UGI Utilities	4.80%	4.50%	4.10%	3.80%	3.40%	-8.30%
Panel Average	7.40%	7.20%	6.70%	6.40%	6.00%	-5.00%
Peoples	15.00%	14.70%	14.30%	14.00%	3.20%	-31.80%
•						
Equitable	6.60%	6.00%	5.70%	11.90%	0.40%	-50.20%
Peoples TWP	20.20%	19.60%	18.90%	17.90%	16.10%	-5.60%

Source: DOT Annual Reports

The Peoples Companies refer to bare steel and cast iron main in their system as "first generation pipe" or "Target Pipe" to be removed and replaced. Exhibit VII-7 displays the miles and capital expenditures associated with Target Pipe replacement for the period 2013 through 2015. Capital expenditures for this period totaled approximately \$258 million for 223 miles of Target Pipe replacement.

Exhibit VII – 7 Peoples Companies Target Pipe Miles Replaced and Capital Investment For the Years 2013 through 2015

	2013	2014	2015				
Miles Replaced							
Peoples Gas	38.8	30.8	33.2				
Equitable Division	-	22.4	26.5				
Peoples TWP	28.3	31.5	11.4				
Cá	apital Investm	ent (MM)					
Peoples Gas	\$68.1	\$33.9	\$51.7				
Equitable Division	-	\$24.9	\$38.6				
Peoples TWP	\$15.0	\$15.0	\$10.8				
Total Miles	67.1	84.7	71.1				
Total Capital	\$83.1	\$73.8	\$101.1				

Source: 2014, 2015, and 2016 Annual Asset Optimization Plan

The People Companies should continue its Target Pipe replacement at accelerated rates to meet replacement goals as established in the Peoples Companies approved LTIIP's. Additionally for future capital spending, projected replacement rates and current Target Pipe quantities, please refer to Finding and Conclusion No. 2 for this information.

2. The Peoples Companies have not developed a comprehensive staffing plan to substantiate the resources required and plan of action to achieve its LTIIP replacement targets.

On June 30, 2016, the PUC approved the Peoples Gas and the Equitable Division Amended Second Revised Long Term Infrastructure Improvement Plan (LTIIP), at Docket P-2013-2342745 for the years 2015 through 2019. Additionally, Peoples TWP had its own LTIIP approved by the Commission on May 23, 2013 for the years 2013 through 2017, at Docket P-2013-2344595. The combined LTIIP modified the existing plan in order to reflect changes with respect to Peoples Gas and the Equitable Division's approach to improve their infrastructure. The changes included the following:

- Deferment of its bar coding information technology project.
- Development of an in-house construction division to perform <u>all</u> pipeline construction related work (by year-end 2016).
- Focus its replacement program on pipelines in urban areas.
- Implementation of smart meter technology.
- Establishment of a new LTIIP category for the replacement and investment in measurement and regulation equipment.

The LTIIP identifies Target Pipe (i.e. the majority of which are bare steel mains) for replacement and related timelines for completion. Each LTIIP has an approved timeline to replace all Target Pipe over a 20-year period. The only difference is that Peoples TWP is to replace transmission lines in a 10-year timeframe; however, it was not identified when the 10-year schedule would begin. Exhibit VII-8 displays the 4,390 total miles of Target Pipe scheduled to be replaced over the remaining years of each respective LTIIP. The majority of Target Pipe is located in urban and suburban areas; the rural area only accounts for approximately 17% of Target Pipe.

Exhibit VII – 8
Peoples Companies
LTIIP Target Pipe in Miles
As of January 2016

	Urban	Suburban	Rural	Total			
Peoples Natural Gas	767	1,248	265	2,280			
Equitable Division	573	539	234	1,346			
Subtotals	1,340	1,787	499	3,626			
Peoples TWP	29	477	258	764			
Totals	1,369	2,264	757	4,390			
	Total Miles = 4,390						

Source: Data Request GO-57

The LTIIPs provide a five-year outlook on the amount of pipe to be replaced and the related capital investment for the Peoples Companies. As shown in Exhibit VII-9, the Peoples Companies projected 531 miles of pipelines replacement at a cost of \$674 million during the years 2015 through 2019. For Peoples Gas and the Equitable Division, the second revised LTIIP resulted in a reduction of Target Pipe replacement due to prioritizing urban pipe replacement located in the City of Pittsburgh. Consequently, the costlier urban pipe replacement in the Equitable Division resulted in a corresponding capital spend decrease at Peoples Gas. Furthermore, the Audit Staff believes based on historical replacement rates for the period 2011–2014 that the Peoples Companies could only realistically achieve a combined replacement rate of approximately 94 miles a year during the LTIIP period as opposed to the target level of 106 miles.

Additionally, the Audit Staff estimates that beyond the current five-year LTIIP period each of the Peoples Companies would have to replace the following corresponding miles of pipe over the remaining 15 years: Peoples Gas - 2,073 miles or 138 miles per year; Equitable Division - 1,159 miles or 77 miles per year; and Peoples TWP - 627 miles or 42 miles per year, Consequently, the Peoples Companies will need to replace 3,713 miles of targeted pipe net of 146 miles of duplicative pipe in the Peoples Gas and Equitable Division territories that can be eliminated as a result of the merger or approximately nearly 250 miles a year which significantly exceeds (i.e., more than double) any historical replacement rates achieved by the Peoples Companies.

Exhibit VII – 9 Peoples Companies LTIIP Projections – Miles Replace\Investment First Five Years of LTIIP

	Peoples Gas		_	Equitable Division		Peoples TWP		
Year [†]	Target Pipe	\$(MM)	Target Pipe	\$(MM)	Target Pipe	\$(MM)	Year [‡]	
2015	42	43.3	27	44.1	29	17	2013	
2016	34	56.8	27	49.2	27	9.1	2014	
2017	39	63.6	39	65.4	27	10.4	2015	
2018	46	70.8	45	71.2	27	11.3	2016	
2019	46	71.8	49	77.1	27	12.8	2017	
Totals	207	\$306.3	187	\$307.0	137	\$60.6		
Average	41.4	\$61.3	37.4	\$61.4	27.4	\$12.1		

^{† -} Years included in Peoples Gas LTIIP for both Peoples Gas and Equitable Division.

Source: Auditor Analysis of Peoples TWP LLC's Long Term Infrastructure Improvement Plan (LTIIP) submitted on January 23, 2013 at Docket No. P-2013-2344595 and Peoples Natural Gas Company LLC's Amended Second Revised LTIIP at Docket No. P-2013-2342745

As noted in its second revised LTIIP, the Peoples Companies indicated the intent to establish a dedicated in-house Construction Department to perform 100% of its capital infrastructure replacement needs where historically only 20% was completed in-house. The Peoples Companies have stated that the Construction Department will be fully staffed with field employees by the end of 2016. The Construction Department is expected to staff approximately 220 field operations employees dedicated to capital work. As of April 4, 2016, the Department had 115 positions filled; leaving 105 vacancies. The Peoples Companies provided a Construction "Ramp-Up" plan on generalizing the current and estimated crews needed, along with an expected hiring plan. The hiring plan had a quarterly ramp-up to add 30, 20, 20 and 37 employees or 107 total employees for 2016. The number of new hires for field operations employees was just 18 as of April 2016 with plans to fill approximately 50 positions by June 2016. However, as previously discussed in Chapter III – Executive Management, the Peoples Companies had proposed a Voluntary Retirement Package (VRP) in (provide month and year) to its field operations employees, more specifically bargaining unit employees (BU). On April 8, 2016, the unions representing Peoples Gas, the Equitable Division, and Peoples TWP voted on and ratified the VRP. Although not finalized as of the end of the Audit Staff's fieldwork in April 2016, management anticipated based on early projections that approximately 100 or 15% of the BU employee workforce would accept the VRP offer.

^{‡ -} Years included in Peoples TWP LTIIP.

Exhibit VII-10 details the number of field operations employees that are bargaining unit employees as of April 4, 2016. The Peoples Companies did state that the retirements would be implemented in phases rather than on a flash cut basis and completed by October 2016.

During the VRP phases, it is important that the Peoples Companies maintain proper staffing levels to assure adequate levels of fully trained staff once these retirements occur. Training new employees who do not have any prior experience could take up to two years to become fully qualified. When considering the

Exhibit VII-10 The Peoples Companies Bargaining Unit Staffing Levels As of April 4, 2016

TOTAL	678
Construction	115
O&M	418
Customer Operations	137
Fleet	8

Source: Data Request GO-72

training requirements and the Peoples Companies' plans to fully staff a dedicated in-house construction department, the Audit Staff is concerned there will be shortages of fully trained and operator qualified field operations employees to meet long term pipeline replacement goals established in the Peoples Companies' respective LTIIPs. Furthermore, the recent retirements anticipated to occur due to the VRP will necessitate an additional 100 employees or a total of 205 hires to fully staff the in-house construction department by year-end 2016. Without a comprehensive staffing plan to address the challenges required to hire, train, and equipment a fully functional in-house construction department to meet its entire pipeline replacement needs, the Audit Staff is concerned that the Peoples Companies may not only be unable to meet its current Target Pipe replacement projections but significantly impact its ability to meet its 20 year pipeline replacement schedule.

3. Certain field operations employees have worked excessive levels of overtime annually during the five year period 2012 through 2015.

As previously displayed field operation employees are organized under the Operations (Exhibit VII-2) and Customer Operations Departments (Exhibit VII-4). Exhibit VII-11 displays the number of field employees, straight time hours, overtime hours, overtime as a percentage of straight time and the percentage change over the 2012-2015 time period for each Company. The Audit Staff's analysis by company or division showed overall overtime levels ranged from approximately 4% (Peoples TWP) to 13% (Peoples Gas). As a whole, the Peoples Companies managed to keep overtime hours below acceptable levels; 15%-20%.

Due to potentially hazardous nature of working with natural gas, excessive amounts of overtime for individual field operations employees can result in fatigue and reduced awareness which can result in injuries to employees (see Chapter X - Human Resources, Finding and Conclusion No. 1) and/or customers and bring unnecessary damage to Company and customer property. Therefore, the Audit Staff also reviewed the amount of overtime incurred annually by individuals from each company for the same period. Individual overtime levels were provided by the Peoples Companies and the five employees with the highest overtime levels are shown in Exhibit VII-12. Many

Exhibit VII – 11 Peoples Companies Field Operation Employees Staffing and Overtime levels For the Years 2012 through 2015

		2012	2013	2014	2015	Percentage of Increase (+) or Decrease (-) Over Period
as	No. of Employees	421	410	406	397	-5.70%
ss G	Straight hrs	863,771	876,235	857,575	821,384	-4.91%
Peoples Gas	Overtime hrs	107,769	80,343	106,506	106,506	-1.17%
Pe	Overtime %	12.48%	9.17%	12.42%	12.97%	3.93%
e _	No. of Employees			153	164	7.19%
tabl	Straight hrs			354,467	375,269	5.87%
Equitable Division	Overtime hrs			36,725	29,750	-18.99%
Ш	Overtime %	NA	NA	10.36%	7.93%	-23.48%
ΝP	No. of Employees		123	122	124	0.81%
s T	Straight hrs		249,130	255,870	258,792	3.88%
Peoples TWP	Overtime hrs		9,804	11,886	11,262	14.87%
Pe	Overtime %	NA	3.94%	4.65%	4.35%	10.58%
	No. of Employees	421	533	681	685	62.71%
Total	Straight hrs	863,771	1,125,365	1,467,912	1,455,445	68.50%
Total	Overtime hrs	107,769	90,147	155,117	147,518	36.88%
	Overtime %	12.48%	8.01%	10.57%	10.14%	-18.76%

Source: Data Request GO-11, 12, 13 and 30

of the field operations employees at Peoples Gas have exceeded 1,040 hours (or approximately 50% of straight time) of overtime for any given year and even have reached as high as 1,535 hours (or approximately 73.8%). The Equitable Division was lower with overtime peaking at 44.7% of straight time, while Peoples TWP was able to keep levels low at roughly 20% of straight time annually.

Based on overall overtime hours, the Peoples Companies, more specifically Peoples Gas and the Equitable Division, should have the resources to control the overtime among its field operations employees. The Peoples Companies will need to examine why certain individuals are incurring large amounts of overtime. As mentioned in Finding and Conclusion No. 4, the Operations Center has three different sets of callout procedures it must follow. Combining the procedures into one set would eliminate any confusion and provide a standardized callout process. Additionally, identifying and then enforcing associated call-out procedures will ensure spreading overtime hours equally among employees.

Exhibit VII – 12
Peoples Companies
Five Employees With Highest Overtime Levels
For the Years 2012 through 2015

	20	12	20	2013 2		14	2015	
Rank	OT Hrs	OT/ST	OT Hrs	OT/ST	OT Hrs	OT/ST	OT Hrs	OT/ST
			S					
1	1,220	58.7%	798	38.4%	1,266	60.9%	1,535	73.8%
2	959	46.1%	782	37.6%	1,029	49.5%	1,260	60.6%
3	874	42.0%	754	36.3%	1,013	48.7%	1,215	58.4%
4	855	41.1%	739	35.5%	1,009	48.5%	1,107	53.2%
5	855	41.1%	726	34.9%	984	47.3%	1,106	53.2%
			Equ	itable Divi	sion			
1					908	43.7%	930	44.7%
2					891	42.8%	728	35.0%
3					883	42.5%	649	31.2%
4					798	38.4%	645	31.0%
5					707	34.0%	605	29.1%
			Р	eoples TW	'P			
1			434	20.9%	416	20.0%	351	16.9%
2			292	14.0%	367	17.6%	324	15.6%
3			291	14.0%	315	15.1%	279	13.4%
4			276	13.3%	297	14.3%	270	13.0%
5			264	12.7%	295	14.2%	245	11.8%

Source: Data Request GO-54

4. Peoples Gas and the Equitable Division did not achieve their merger commitment emergency response goals in 2014 and 2015.

As part of the merger settlement agreements, at A-2013-2353647, A-2013-2353649 and A-2013-2353651, Peoples Gas is required to provide an annual update on all merger commitments for five calendar years that followed the merger closing on December 16, 2013. A merger commitment was established to ensure reliable emergency response levels during the transition. Paragraph 66 Section (d) stated that Peoples and Equitable Divisions shall maintain a "percent response within 60 minutes to emergency calls of at least 98.5% for 2014, 2015 and 2016 and 99% for 2017 and 2018."

Exhibit VII-13 shows emergency statistics for responses taking over 60 minutes for the period 2012-2015. The emergency response times are segregated by normal business hours, after business (2nd/3rd shifts) and weekend and holiday hours. As shown in the exhibit, response levels spiked in 2014 for Peoples Gas and the Equitable Division, and remained at the elevated levels for the 2015 calendar as well. The blocks highlighted in yellow show shifts that were above the approved levels for each

Exhibit VII – 13 Peoples Companies Emergency Response over 60 Minutes For the Years 2012 through 2015

		20	12	20	13	2014		20	15
		> 60 min	Total						
	Normal Hours	27	5960	19	6283	40	7265	40	7591
<u> </u>	Nomiamours		0.5%		0.3%		0.6%		0.5%
Gas	2nd/3rd Shift	82	3230	74	3223	125	4010	117	3596
	Zna/ora omit		2.5%		2.3%		3.1%		3.3%
ple	Holiday/	49	2068	64	2299	75	2565	86	2427
Peoples	Weekend		2.4%		2.8%		2.9%		3.5%
Ф.	Totals	158	11258	157	11805	240	13840	243	13614
	Totals		1.4%		1.3%		1.7%		1.8%
n C	Normal Hours					35	4760	38	4859
Division	1401111ai i 10ui 3						0.7%		0.8%
Ξ	2nd/3rd Shift					233	2837	215	2587
	Zna/ora orme						8.2%		8.3%
Equitable	Holiday/					128	1843	152	1779
ita	Weekend						6.9%		8.5%
nb	Totals					396	9440	405	9225
Ш	Totalo						4.2%		4.4%
	Normal Hours			5	998	6	1125	8	1117
٩/	140mmar mours				0.5%		0.5%		0.7%
≤	2nd/3rd Shift			3	335	10	554	11	540
·S			-		0.9%		1.8%		2.0%
ble	Holiday/		-	2	310	5	345	11	398
Peoples TWP	Weekend				0.6%		1.4%		2.8%
Ф	Totals			10	1643	21	2024	30	2055
	o: Data Baguast CO				0.6%		1.0%		1.5%

Source: Data Request GO-43 and Auditor Analysis

company. The red blocks indicate overall response levels that did not meet the agreed upon performance level set forth in the merger commitments. Therefore, Peoples Gas and the Equitable Division failed to maintain a 98.5% performance level for both the 2014 and 2015 calendar years.

The Peoples Companies were able to provide reason codes for each arrival that took longer than 60 minutes. The distribution and trends by reason codes can be found in Exhibit VII-14 for the years 2013 through 2015. As indicated in Exhibit VII-14, the majority of responses over 60 minutes were due to Dispatch (2015), Distance (2013-2015), No Customer Serviceman (CSM) Available (2013-2015), and Traffic (2013-2014). In this case, Dispatch, Distance and No CSM Available are controllable instances the Peoples Companies can address. The definition of each major reason code is as follows:

- Dispatch call center issues, or any combination of dispatch time and related trouble traveling to address
- Distance distance between field service employee and address of call
- No CSM Available excessive time spent going through call-out rotation
- Traffic traffic pattern heavier than normal

Exhibit VII – 14
Peoples Companies
Causes of Emergency Response over 60 Minutes
For the Years 2013 through 2015

	2013		2014		2015		
Reason Code	Peoples Gas	Peoples Gas	Equitable Division	Peoples TWP	Peoples Gas	Equitable Division	Peoples TWP
Address/Zone Issue	3	7	1	0	2	9	1
Call Out Completed Prior	2	0	9	0	0	0	0
Job	2	1	0	0	0	0	0
Construction	0	1	0	0	0	0	0
CSM Issue	0	1	3	0	5	1	1
Dispatch	1	4	0	0	38	34	3
Distance Multiple	68	111	38	21	86	67	9
Emergencies	11	30	55	0	2	33	0
Need GM&R Crew	0	0	0	0	0	0	0
No CSM Available	26	20	231	0	64	230	9
Shift Change	3	0	0	0	0	0	0
Start Up	11	1	0	0	0	0	0
System/Connectivity	2	2	2	0	14	8	2
Time Discrepancy	0	0	0	0	1	2	0
Traffic	14	32	16	0	8	11	2
Truck at Shop	11	5	0	0	6	0	0
Vehicle Issue	1	1	2	0	5	2	0
Weather	1	7	14	0	12	5	3
Unknown	1	17	25	0	0	3	0
TOTALS	157	240	396	21	243	405	30

Source: Data Request GO-43 and Auditor Analysis

For the years 2014 and 2015, Distance and No CSM Available accounted for approximately 65% of the reason codes; No CSM Available being the main contributor at the Equitable Division. No CSM Available meant that the Operations Center was unable to contact a field service employee on the call-out rotation. As a result, dispatches taking longer than 15 minutes increased as well. Exhibit VII-15 shows the sharp rise of emergency orders that took the Operations Center longer than 15 minutes

to dispatch. For Peoples Gas, Distance reason codes attributed the most for extended response times. In 2015, Dispatch saw a large increase; growing from 4 to 75 occurrences. Dispatch issues can be attributed to the Peoples Companies bringing Equitable Division call center in-house in June 2015, creating and transitioning the Operations Center into the Customer Operations Department in July 2015.

Exhibit VII – 15 Peoples Companies Emergency Dispatch over 15 Minutes For the Years 2013 through 2015

	2013		20 ⁻	14	2015	
	> 15 min	Total	> 15 min	Total	> 15 min	Total
Peoples Gas	37	11,805	153	13,840	256	13,614
		0.31%		1.11%		1.88%
Equitable Division			257	9,440	344	9,225
Equitable Division				2.72%		3.73%
Peoples TWP	4	1,643	8	2,024	30	2,055
reopies TWF		0.24%		0.40%		1.46%
TOTALS	41	13,448	418	25,304	630	24,894
TOTALS		0.30%		1.65%		2.53%

Source: Data Request GO-58 and Auditor Analysis

In order to improve dispatch and arrival times, the Peoples Companies need to address the No CSM Available, Distance, and Dispatch issues they encountered during 2014 and 2015. A standardized call-out procedure and mandatory stand-by list will decrease issues with contacting and dispatching emergency orders to field employees. As of March 2016, each company had a different set of procedures regarding emergency call-outs; due to three separate union agreements. Also, implementing a proximity-based call-out procedure would assist in identifying the closest field employee to the location of an emergency call. This procedure would reduce the amount of Distance related occurrences. Lastly, the Peoples Companies should ascertain individual field employee overtime statistics (refer to Finding and Conclusion No. 3) and determine if additional shift work may assist in the reduction of excessive emergency response times.

5. Collectively, the Peoples Companies have seen a decrease in third-party line hits; however Peoples Gas and the Equitable Division have exhibited low third-party damage collection rates.

Through damage prevention programs, such as effective contractor education, effective tracking and reporting of third-parties that damage the Peoples Companies' facilities (including the identification of repeat offenders), and project oversight in urban areas the Peoples Companies have been able to limit the number of third-party line hits it has experienced. Exhibit VII-16 details the numbers of line hit damages that were company at-fault, locator error and contractor hits. At first glance it appears that

Peoples Gas had an increase in line hits for the 2015 calendar year, but this was due to overlapping territory with the Equitable Division which resulted in a double count. Since 2011, Peoples Gas, and collectively the Peoples Companies, has been able to reduce the frequency of line hits per 1,000 tickets.

Exhibit VII – 16
Peoples Companies
Third Party Damages by Fault
For the Years 2011 through 2015

Peoples Gas	2011	2012	2013	2014	2015
Company At Fault	25	20	18	13	21
Locator At Fault	68	65	47	49	48
Outside Contractor At Fault	191	220	195	203	297
Total Number of Line Hits	284	305	260	265	366
# Line Hits / 1,000 Tickets	4.00	4.47	3.69	1.77	2.71

Equitable Division	2011	2012	2013	2014	2015
Company At Fault				12	6
Locator At Fault				24	5
Outside Contractor At Fault				147	56
Total Number of Line Hits				183	67
# Line Hits / 1,000 Tickets				1.86	0.90

Peoples TWP	2011	2012	2013	2014	2015
Company At Fault		1	1	1	1
Locator At Fault		5	1	2	1
Outside Contractor At Fault		33	24	29	18
Total Number of Line Hits		39	26	32	20
# Line Hits / 1,000 Tickets		2.21	1.45	0.61	0.42

The Peoples Companies - Total	2011	2012	2013	2014	2015
Company At Fault	25	21	19	26	28
Locator At Fault	68	70	48	75	54
Outside Contractor At Fault	191	253	219	379	371
Total Number of Line Hits	284	344	286	480	453
# Line Hits / 1,000 Tickets	4.00	4.02	3.25	1.62	2.08

Source: Data Request GO-25

Although the Peoples Companies have achieved relative success in reducing third-party line hits in managing its damage prevention program, Peoples Gas and the Equitable Division have not mirrored that success in collecting from third-parties for the costs associated with the repair and/or replacement of damaged infrastructure. At Peoples Gas, damage reports are created by Operations personnel noting the responsible party, cost to repair information and the party determined as responsible for

the damage. This information is then submitted to the Accounting Department (Accounting) whom reviews the information, and then creates an invoice. The invoice and copies of the damage report are mailed to the responsible party. Once received the responsible party has an opportunity to dispute the claim. If disputed, Accounting will interface with the Operations employee whom created the damage report to assess the dispute. At that time, Operations will determine if the responsible party has a valid dispute. If valid, the responsible party is then notified of any adjustments, sent a corrected invoice, and is expected to pay the amount in full.

The Audit Staff evaluated third-party damage collection trends for each of the Peoples Companies and collection performance relative to two other local utilities. Exhibit VII-17 details the amounts billed, adjustments made, damages collected, and associated write-offs for each respective year. For the years of 2011 through 2015, Peoples Gas had collection rates ranging from 18.1%% to 45.2% while the Equitable Division exhibited collection rates of 17.5% and 38.6% for 2014 and 2015 (which were the only years data was available). Conversely, Peoples TWP exhibited damage collection rates of 80.4% and 71.7% for 2014 and 2015, respectively. It also should be noted that the average invoice amounts at Peoples TWP are much lower than those at Peoples Gas and the Equitable Division.

Additionally provided in Exhibit VII-17 is summary information for two other NGDCs located near the Peoples Companies and their collection performances as well. As displayed, each utility was able to consistently achieve collection damage rates of at least 70% with exception of Year 3 for Utility A. It is reasonable to expect that the Peoples Companies could achieve performance levels similar to that of other local utilities. Exhibit VII-18 displays the potential cost savings by year that could be realized if the Peoples Companies could consistently achieve 65% collection rates. By achieving this rate, the Audit Staff estimates that total collections for third-party damages from 2011 through 2015 would have increased by approximately \$742,000. On an annual basis, Peoples Gas and the Equitable Division could have saved approximately \$121,000 and \$66,000, respectively by achieving this collection rate. Since Peoples TWP was already achieving this collection rate two out of the three years that collection data existed for the period reviewed, the average annual savings at Peoples TWP would be minimal.

The Peoples Companies should increase their efforts to pursue open balances of third-party damages. The Audit Staff believes that more oversight and involvement on collection practices with the Peoples Companies General Counsel is needed. Not only would this practice increase monies collected from third-parties but could potentially further encourage third-parties to increase their efforts to reduce line hits incurred on the Peoples Companies' facilities by establishing a culture of zero tolerance with the local contractor community. By actively pursuing damage recovery, contractors should presumably work more safely realizing the possible monetary consequences associated with damaging utility infrastructure.

Exhibit VII – 17 Peoples Companies

Third Party Receivables Collection Performance vs Other Comparable Pennsylvania Utilities For the Years 2011 through 2015

	Invoiced (\$)	Adjustments (\$)	Collected (\$)	Balance (\$)	Collected (%)	Write-Offs (\$)					
		, ,	Peoples Gas								
2011	338,306	(36,638)	(103,224)	198,444	34.2%	(142,389)					
2012	451,825	(275,293)	(58,514)	118,018	33.1%	(93,330)					
2013	691,498	(78,963)	(275,498)	337,037	45.0%	(237,252)					
2014	407,403	(22,009)	(174,352)	211,042	45.2%	(3,036)					
2015	594,682	(51,667)	(98,295)	444,720	18.1%	0					
Equitable Division											
2014	165,026	(34,448)	(22,819)	107,759	17.5%	0					
2015	290,498	(22,842)	(103,406)	164,250	38.6%	0					
			Peoples TWP								
2013	46,673	(7,570)	(31,439)	7,664	80.4%	(7,662)					
2014	74,098	(13,838)	(43,214)	17,046	71.7%	0					
2015	57,707	(315)	(30,294)	27,098	52.8%	0					
	Peoples Companies										
2011	338,306	(36,638)	(103,224)	198,444	34.2%	(142,389)					
2012	451,825	(275,293)	(58,514)	118,018	33.1%	(93,330)					
2013	738,171	(86,533)	(306,937)	344,701	47.1%	(244,914)					
2014	646,527	(70,295)	(240,385)	335,847	41.7%	(3,036)					
2015	942,887	(74,824)	(231,995)	636,068	26.7%	0					
			PA Utility A								
Year 1	3,433,331		(2,496,448)	936,883	72.7%						
Year 2	3,019,399		(2,157,777)	861,622	71.5%						
Year 3	2,196,297		(1,077,625)	1,118,672	49.1%						
TOTALS	8,649,027		(5,731,850)	2,917,177	66.3%						
			PA Utility B								
Year 1	181,305		(127,391)	53,914	70.3%						
Year 2	335,344		(264,883)	70,461	79.0%						
Year 3	514,279		(420,942)	93,337	81.9%						
Year 4	519,232		(355,421)	163,811	68.5%						
TOTALS	1,550,160		(1,168,637)	381,523	75.4%						

Source: Data Request GO-48 and Auditor Analysis

Exhibit VII – 18 Peoples Companies Savings Achieved at 65% Collection Performance Rate For the Years 2011 through 2015

Year	Company	Invoiced (\$)	Adjustments (\$)	Collected (\$)	65% Collected (\$)	Savings (\$)
2011	Peoples Gas	338,306	(36,638)	(103,224)	196,084	92,860
2012	Peoples Gas	451,825	(275,293)	(58,514)	114,746	56,232
	Peoples Gas	691,498	(78,963)	(275,498)	398,148	122,650
2013	Peoples TWP	46,673	(7,570)	(31,439)	25,417	NA
	Total	738,171	(86,533)	(306,937)	423,565	122,650
	Peoples Gas	407,403	(22,009)	(174,352)	250,506	76,154
2014	Equitable Division	165,026	(34,448)	(22,819)	84,876	62,057
2014	Peoples TWP	74,098	(13,838)	(43,214)	39,169	NA
	Total	646,527	(70,295)	(240,385)	374,551	138,211
	Peoples Gas	594,682	(51,667)	(98,295)	352,960	254,665
2015	Equitable Division	290,498	(22,842)	(103,406)	173,976	70,570
2013	Peoples TWP	57,707	(315)	(30,294)	37,305	7,011
	Total	942,887	(74,824)	(231,995)	564,241	332,246

NA – Not Applicable

Source: Data Request GO-48 and Auditor Analysis

Recommendations

- 1. Expedite the replacement of unprotected bare steel pipe to ensure LTIIP targets are met for each of the Peoples Companies.
- 2. Develop a staffing plan that accounts for the pending retirements while addressing the need for additional qualified personnel to perform all field operations activities and ensure the completion of future LTIIP pipeline replacement projects.
- 3. Address excessive individual overtime levels through corrective measures; such as shift resources, standardizing and enforcing emergency call-out procedures, etc.
- 4. Develop and implement an Emergency Response Improvement Plan that addresses controllable causes to excessive emergency dispatch and response times to conform to merger commitments.
- 5. Increase third-party line hit damage collection performance by transferring the responsibilities to the General Counsel to actively pursue and litigate damage claims.

VIII. CUSTOMER SERVICE

Background

As discussed in Chapter II – Background, Peoples Natural Gas Company LLC (Peoples Gas), Peoples Natural Gas Company LLC – Equitable Division (the Equitable Division), and Peoples TWP LLC (Peoples TWP), collectively referred to as the Peoples Companies, are natural gas utility operating companies ultimately owned by SteelRiver LDC Ventures LLC which is indirectly controlled by SteelRiver Infrastructure Partners LP (collectively referred to as SteelRiver) through various subsidiaries. Peoples Service Company LLC (PSC) is an indirect subsidiary of SteelRiver that provides certain customer service functional support to all affiliates. These customer support functions specifically include the call center, billing, and limited aspects of metering. Consequently, the Customer Service functions for the Peoples Companies are bifurcated in that the operating companies also still directly perform customer service field related activities (e.g., meter reading, shut-offs, turn-ons, etc.). The combined PSC and Peoples Companies reporting structure for the Customer Contact, Billing and Metering, and Customer Operations positions that perform work for, or on behalf of, the Peoples Companies is displayed in Exhibit VIII-1.

Exhibit VIII – 1 Peoples Natural Gas Company LLC and Peoples Service Company LLC **Customer Contact, Billing and Metering, and Customer Operations Organization Structure** As of April 2016 **Chief Executive Officer** Peoples Gas Peoples Service Company Senior Vice President, Chief Information Officer Director, Director, Director, **Customer Contact Billing & Metering Customer Operations** Supervisors, Manager, Manager, Call Center/ Account Billing **Field Customer Service Maintenance**

Source: Data Request EM-2

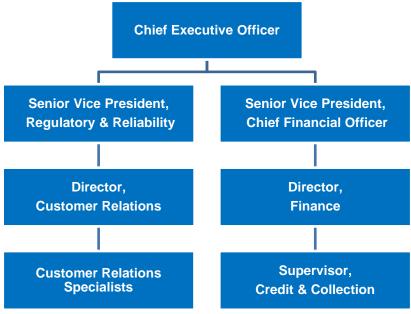
The Senior Vice President, Chief Information Officer (CIO), whose responsibilities in part encompass the customer service function, has direct reports which include the Directors for Customer Contact, Billing and Metering, and Customer Operations. The Director, Customer Contact directs and oversees all aspects of the customer contact functions including call center, interactive voice response, self-service offerings, customer chat, and email services. This position also supports the Director, Customer Relations who is responsible for building and maintaining external relationships with the Pennsylvania Public Utility Commission's (PUC) Bureau of Consumer Services (BCS), legislative, and community-based agencies and customers with a focus on Chapter 56 compliance. There are six supervisors that report to the Director, Customer Contact.

The Director, Billing and Metering directs and oversees all aspects of the customer billing and metering activities including meter reading and all customer billing activities. This position too is responsible for building and maintaining external relationships with regulatory, legislative, and community-based agencies and customers with a focus on compliance. The Manager, Billing reports to the Director, Billing and Metering.

The Manager, Field Customer Service reports directly to the Director, Customer Operations. The Manager, Field Customer Service plans, manages, and coordinates all field customer service and first response activities to ensure safe, reliable, and regulatory compliant service. The manager is responsible for Field Service Operations & Maintenance (O&M) and capital budget, safety, customer service, emergency response, and development of supervisory personnel.

Customer Relations and Credit & Collection activities are performed by Peoples Gas employees on behalf of the Peoples Companies and other affiliates. The reporting structure for the Customer Relations and Credit & Collection groups are displayed in Exhibit VIII-2. The Director, Customer Relations, who reports to the Senior Vice President, Regulatory & Reliability, develops and manages the Universal Service and PUC's Chapter 56 compliance reporting programs, and works with Rates and Regulatory to ensure tariff compliance and reporting of costs for recovery under the approved Universal Service riders. This position is responsible for maintaining and directing favorable relationships with BCS and local business leaders. The Director, Customer Relations also manages select regulatory projects. There are five Customer Relations Specialists that report to the Director, Customer Relations. The Supervisor, Credit & Collection, who reports to the Director, Finance, is the first line supervisor responsible for directing the Credit and Collection group, monitoring performance and work load, and maintaining standards and compliance in conjunction with PUC monitored customer billing and termination metrics, and Peoples Companies' credit and collection policies and procedures.

Exhibit VIII – 2
Peoples Natural Gas Company LLC
Customer Relations and Credit & Collection Organization Structure
As of April 2016



Source: Data Request EM-2

Findings and Conclusions

Our examination of the Customer Service function included a review of the organizational structure, current policies and procedures, performance measures and levels, customer information systems, call center, universal service, credit and collections procedures, and meter reading. Based on our review, the Peoples Companies should initiate or devote additional efforts to improving the efficiency and/or effectiveness of its Customer Service function by addressing the following issues:

1. Peoples Gas and the Equitable Division have a high number of inside meter sets.

Natural gas meter set (i.e., gas meter and associated gas regulator) locations need to be selected with consideration for the safety of the building being supplied with gas and for the meter piping itself. Normally an outdoor location of meter sets is preferred to facilitate the safe relief of excess gas pressure if an emergency situation occurs. Pressure is designed to be relieved at the meter set's regulator to protect the downstream piping from becoming over-pressurized. Meter sets that are located inside structures have become an increasing public safety concern resulting in the promulgation of a PUC regulation at 52 Pa. Code § 59.18 (§59.18).

As of September 13, 2014, Commission regulations at §59.18 require all jurisdictional natural gas utilities in part to locate new or existing meter sets upon

replacement outside and aboveground. In addition, utilities shall complete replacement of existing facilities by September 13, 2034 or incorporate this requirement in a distribution integrity management plan, whichever occurs first.

As shown in Exhibit VIII-3, Peoples Gas and the Equitable Division as of December 2015 had a high number of inside meter sets. More specifically, as of year-end 2015, Peoples Gas had 46,376 inside meter sets, or 12.25% of its total meters, and the Equitable Division had 46,589 inside meter sets, or 17.08% of its total meters. By way of comparison, Peoples TWP only had 2,107 inside meter sets, which was only 3.42% of its total meters.

Exhibit VIII – 3 Peoples Companies Number and Percent of Inside Meter Sets As of December 2015

Company	Inside Meter Sets	Outside Meter Sets	Total Meter Sets	Percentage of Total Meters That are Inside
Peoples TWP	2,107	59,574	61,681	3.42%
Peoples Gas	46,376	332,356	378,732	12.25%
Equitable Division	46,589	226,143	272,732	17.08%
Totals	95,072	618,073	713,145	13.33%

Source: Data Request CS-25 and Auditor Analysis

The Peoples Companies stated, that for all new construction, meter sets are deployed in compliance with §59.18. The most common reasons for relocating an existing meter set that is located inside include the following:

- Customer service lines determined to be leaking during a regular leak survey or as a result of an emergency investigation at a location.
- Potentially hazardous inside meter conditions discovered at a residence during an inspection and/or meter reading.
- Renewal of a main line with connecting services that include inside gas meter sets.

Peoples Gas has had a number of meters not read in six and twelve months due, in part, to meters located inside customers' premises. Safety concerns also need to be considered due to the potential risk for natural gas incidents associated with inside meter sets. As of the end of 2015, the Peoples Companies had over 95,000 inside meter sets. Consequently, in order to comply with 52 Pa. Code § 59.18, the Peoples Companies will need to replace approximately 5,000 meters annually until the end of 2034. However, The Peoples Companies stated that in 2014 and 2015 only 802 inside meter sets on average had been relocated outside.

2. The Peoples Companies have not established a uniform Theft of Service Program.

Theft of service (TOS) refers to customer tampering with or bypassing a meter in order to receive unmetered gas service. Consequently, legitimate customers bear the cost of gas service theft. In addition, theft of service can lead to potentially dangerous conditions that pose a threat to public safety. As shown in Exhibit VIII-4, the number of known TOS incidents has increased at Peoples Gas from 84 in 2012 to 220 in 2014 which equated to lost revenue of approximately \$19,000 and \$75,000, respectively. For the period 2012-2015, Peoples Gas lost approximately \$216,000 in revenue due to TOS, or approximately \$54,000 annually. Although the number of incidents declined to 126 in 2015, the volume of gas and revenue lost per incident approximately doubled from 2012 to 2015.

Exhibit VIII – 4
Peoples Companies
Theft of Service
For the Years 2012 through 2015

Company	Year	Number of Incidents	MCFs Used	MCFs per Incident	Amount Billed for Lost Revenue	Amount Billed per Incident
	2012	84	2,096	25	\$18,874	\$225
	2013	166	5,854	35	\$65,689	\$396
Peoples Gas	2014	220	7,920	36	\$75,179	\$342
	2015	126	6,657	53	\$56,041	\$445
	Total	596	22,527	38	\$215,783	\$362
Equitable Division	2015	34	942	28	\$3,621	\$107
Peoples TWP	2015	7	151	22	\$1,612	\$230

Source: Data Request CS-3 and Auditor Analysis

Upon inquiry by the Audit Staff, the Peoples Companies indicated that they don't believe that TOS is increasing, but rather the Companies have had greater success in detecting incidents. Management stated that they have improved the identification of TOS due in part to improved tracking reports since conversion to SAP in 2011. Also, agents have been trained to recognize TOS and have improved their coordination with field personnel for verification.

Despite these improvements, there is no uniform TOS program currently at the Peoples Companies. At Peoples Gas and Peoples TWP, the respective Billing Departments identify usage on inactive meters via meter reading reports. Service orders are then created for the respective Field Metering Service (FMS) personnel to investigate. Additionally, in the event any field personnel identify a potential TOS in their routine daily activity, service orders are created for the field TOS personnel to investigate. If theft is subsequently found, the FMS employee will turn-off service at the

curb and meter and install hard security. Hard security involves a variety of locking devices when it is found that the standard barrel lock has been tampered with or broken. Also, a plate can be added to the meter so no gas can pass through. The Billing Department will estimate usage based on past history and weather, and bill the account. The customer must pay the theft amount prior to gas service being restored.

Similar to Peoples Gas and Peoples TWP, the PSC Billing Department, on behalf of the Equitable Division, identifies usage on inactive meters via meter reading reports. Service orders are then created for Field Theft of Service (FTS) personnel to investigate. Additionally, if any field personnel identify a potential TOS in their daily activity, orders are created for FTS to investigate. If TOS is identified, meter and curb are shut-off. Billing for gas usage and time and material are provided to the customer. The customer is given 30 days to pay the outstanding TOS invoice. If the invoice remains unpaid after 30 day, the invoice is presented to the local magistrate for collections and possible criminal prosecution.

The Peoples Companies reviewed an American Gas Association (AGA) Gas Theft Detection best practice survey for evaluating and implementing an effective TOS program for the Peoples Companies. The AGA routinely coordinates Internal Audit Committee surveys of other AGA member companies for their current or best practices upon request. Ten utilities responded to an AGA March 2015 survey request regarding their gas theft detection functions, ongoing procedures or reporting to identify potential gas theft, field employee gas theft training, and associated incentive programs. Most respondents indicated that they utilize at least portions of the following:

- Maintain Gas Recovery, Revenue Protection, or Security Departments with trained investigators.
- Generate daily reports of meter usage on inactive services (similar to what is currently done at the Peoples Companies). Many employ tip-lines and energy sweeps to identify meter tampering in high theft areas, and other data analytic reporting.
- Provide ongoing training to field employees and meter readers to identify meter tampering, although only 50% of respondents provide employee incentives for substantiated gas theft identification.

A July 15, 2015 Peoples Companies internal audit report of TOS recommended expansion of the Equitable Division's TOS program to Peoples Gas and Peoples TWP. In the internal audit report, a positive finding of the review found that the Equitable Division maintains a comprehensive gas theft function that has demonstrated a record of gas theft identification and associated financial recoveries; and maintains a toll free tip line for consumers to report suspected gas theft. The internal audit recommended that:

The Peoples Companies should maintain a comprehensive and best practices gas theft detection function by expanding the Equitable Division

model and enhancing producer gas theft capabilities, transferring the vacant call center gas theft investigator position to this established Equitable Division modeled group, developing an appropriate training program for field employees and meter readers to better identify gas theft and meter tampering, expanding communication of the tip line, and embracing an incentive program for the reporting of substantiated gas thefts.

Management's response was as follows:

Recommendation accepted, subject to collective bargaining constraints. Operations and call center management will coordinate, subject to the applicable collective bargaining agreements, the expansion of the Equitable Division gas theft detection program to include the complete Peoples Gas and Peoples TWP system; and comprehend the best practice elements identified in the recommendation by December 31, 2015.

The Peoples Companies have stated that they are currently addressing the internal audit recommendation as follows:

- Operations and call center management will be coordinating, subject to the applicable collective bargaining agreements, the expansion of the Equitable Division theft detection program. Collective bargaining is in progress at this time. Once an agreement is reached this initiative will be enacted per the internal audit recommendation.
- Equitable Division personnel are union personnel whose territory is within the
 Equitable Division only. Union rules prohibit sharing of duties with other union
 or non-union work efforts. The investigation for the balance of Peoples Gas
 and Peoples TWP will be conducted.
- The fundamentals of TOS are covered in basic light up programs and basic customer service training. A focused TOS training module, incorporating many aspects of the Equitable Division model, is under development. Additionally, an annual TOS program was established for meter reading by Heath and Grid One, the meter reading contractors. The initial presentation to those contractors was conducted in January 2016.
- The Peoples Companies expect to analyze the benefit of the current tip line to determine the benefit of expansion by the third quarter of 2016.
- Peoples will evaluate the benefit of an incentive program when evaluating the benefit of expansion of the tip line.

The Peoples Companies are reviewing the entire TOS process to determine best practices, including field identification (i.e., customer service and meter reading), employee training, public education, public hot-line advertisement, processes for remediating TOS when found and identifying potential TOS via historical consumption data trends. This program review was expected to produce a new TOS policy and a revised set of both office and field procedures by the first quarter of 2016.

3. Peoples Gas has a higher percentage of gross write-offs than the panel average of other Pennsylvania Natural Gas Distribution Companies.

As shown in Exhibit VIII-5, Peoples Gas had a higher gross write-off ratio than the panel average of Pennsylvania Natural Gas Distribution Companies (NGDCs) in 2010, 2013, and 2014. The Equitable Division had a slightly higher gross write-off ratio than the panel average in 2011 and 2013, but was not owned by SteelRiver during these years. Peoples TWP was below the panel average in all five years.

Exhibit VIII – 5
Peoples Companies vs. Pennsylvania Panel
Gross Write-off Ratio
For The Years 2010 through 2014

	2010	2011	2012	2013	2014
Columbia Gas	2.27%	2.82%	2.80%	2.00%	2.20%
NFG – PA Division	3.39%	2.00%	2.60%	2.20%	2.10%
PECO Gas	1.17%	0.97%	0.70%	0.50%	0.50%
UGI Gas	2.43%	2.27%	2.30%	2.20%	3.00%
UGI Penn Natural Gas	2.75%	2.10%	1.80%	1.60%	2.20%
Panel Average	2.40%	2.03%	2.04%	1.70%	2.00%
Peoples Gas	3.59%	1.82%	0.30%	3.60%	2.60%
Equitable Division	2.19%	2.13%	1.90%	1.90%	2.00%
Peoples TWP	1.22%	1.00%	1.85%	1.36%	1.03%

Source: 2010-2014 BCS Reports on Universal Service Programs and Collection Performance

Average arrearages have increased at Peoples Gas and the Equitable Division. Exhibit VIII-6 shows the average arrears for years 2010-2015 for the Peoples Companies. Data was unavailable for all of 2010 and January – June 2011 for Peoples Gas, and January - July of 2010 for Peoples TWP due to these timeframes being prior to each company's conversion to SAP. As such, our focal point for performance at Peoples and Peoples TWP was the years 2012 to 2015 and 2011 to 2015, respectively.

At Peoples Gas, arrears improved from 2012 to 2013 (from approximately \$21.6 million to \$19.3 million), but has been steadily increasing each year since to approximately \$28.9 million in 2015. For the period 2012-2015, accounts in arrears over 90 days have ranged from 55.9% to 69.6% of total accounts in arrears. This may explain the relatively higher write-off ratio performance during the period reviewed.

Exhibit VIII – 6 Peoples Companies Arrearages For The Years 2010 through 2015

			Peoples Ga	S		
Arrears in						
Days	2010	2011	2012	2013	2014	2015
1 – 30	NA	\$ 3,897,508	\$ 3,430,788	\$ 3,225,000	\$ 9,361,537	\$ 6,582,331
31 - 60	NA	\$ 3,104,784	\$ 3,108,333	\$ 1,625,000	\$ 3,478,480	\$ 2,938,451
61 - 90	NA	\$ 2,899,258	\$ 1,766,667	\$ 1,016,667	\$ 1,319,564	\$ 1,916,645
91 - 120	NA	\$ 2,905,231	\$ 2,546,329	\$ 2,955,058	\$ 1,139,865	\$ 1,392,242
120+	NA	\$13,993,863	\$10,781,216	\$10,477,025	\$16,841,373	\$16,097,645
Balance	NA	\$26,800,644	\$21,633,333	\$19,298,750	\$32,140,820	\$28,927,314
% over 90	NA	63.1%	61.6%	69.6%	55.9%	60.5%
			Peoples TW	P		
Arrears in						
Days	2010	2011	2012	2013	2014	2015
1 - 30	\$ 920,946	\$ 2,481,047	\$ 2,028,612	\$ 2,307,557	\$ 2,265,842	\$ 1,565,470
31 - 60	\$ 346,884	\$ 1,624,822	\$ 1,199,491	\$ 1,192,216	\$ 545,428	\$ 548,914
61 - 90	\$ 338,769	\$ 1,214,126	\$ 945,178	\$ 882,913	\$ 375,277	\$ 336,923
91 - 120	\$ 470,304	\$ 897,460	\$ 766,330	\$ 680,395	\$ 299,428	\$ 231,969
120+	\$ 2,611,650	\$ 3,626,432	\$ 3,672,552	\$ 3,318,308	\$ 3,667,088	\$ 2,266,544
Balance	\$ 4,688,554	\$ 9,843,887	\$ 8,612,163	\$ 8,381,390	\$ 7,153,064	\$ 4,949,820
% over 90	65.7%	46.0%	51.5%	47.7%	55.5%	50.5%
		Ec	uitable Divis	sion		
Arrears in	0040	0044	0040	0040	004.4	0045
Days	2010	2011	2012	2013	2014	2015
1 - 30	\$ 3,906,129	\$ 3,822,876	\$ 2,816,593	\$ 3,458,732	\$ 4,664,309	\$ 6,275,512
31 - 60	\$ 1,973,205	\$ 1,701,857	\$ 1,140,206	\$ 1,509,264	\$ 2,269,968	\$ 3,425,550
61 - 90	\$ 1,261,339	\$ 1,034,309	\$ 702,986	\$ 987,390	\$ 1,555,575	\$ 1,560,168
91 - 120	\$ 985,437	\$ 780,837	\$ 526,206	\$ 739,398	\$ 1,094,496	\$ 857,810
120+	\$ 8,388,233	\$ 7,354,822	\$ 6,217,479	\$ 5,783,532	\$ 4,773,180	\$ 4,474,859
Balance	\$16,514,342	\$14,694,701	\$11,403,471	\$12,478,316	\$14,357,529	\$16,593,899
% over 90	56.8%	55.4%	59.1%	52.3%	40.9%	32.1%

Source: Data Request CS-11 and Auditor Analysis

Performance at Peoples TWP has improved steadily from 2011 to 2015, with arrears decreasing from approximately \$9.8 million to \$4.9 million. Accounts in arrears over 90 days have increased slightly from 46% of total accounts in arrears in 2011 to 50.5% of total accounts in arrears in 2015. As shown previously in Exhibit VIII-5, the write-off ratio performance for Peoples TWP was better than the panel average during the period reviewed.

Since the 2014 acquisition by SteelRiver, the Equitable Division has seen arrears increase from approximately \$14.4 million to \$16.6 million. Arrears over 90 days represented 40.9% and 32.1% of total accounts in arrears for 2014 and 2015,

respectively. Since the reported write-off performance for 2015 had yet to be published as of March 2016, it is unknown if the Equitable Division will have a relatively higher gross write-off ratio than the panel of NGDCs for 2015.

The Peoples Companies stated that Peoples TWP has been increasing the requirement for security deposits for new customers determined to have a credit risk while Peoples Gas and the Equitable Division have reduced the requirement for security deposits. As shown in Exhibit VIII-7, Peoples Gas and the Equitable Division's security deposits decreased from 2010-2015 while Peoples TWP's increased.

Exhibit VIII – 7 Peoples Companies Security Deposits For The Years 2010 through 2015

Peoples Gas	2010	2011	2012	2013	2014	2015	Percent Difference
Number	43,030	26,594	9,397	10,667	23,272	13,282	-69.13%
Amount	\$6,914,003	\$2,951,783	\$1,449,070	\$1,267,152	\$2,093,529	\$1,766,765	-74.45%
Equitable Division	2010	2011	2012	2013	2014	2015	Percent Difference
Number	7,461	8,304	7,690	7,853	7,265	3,605	-51.68%
Amount	\$1,320,597	\$1,469,808	\$1,410,475	\$1,342,844	\$1,296,761	\$730,793	-44.66%
Peoples TWP	2010	2011	2012	2013	2014	2015	Percent Difference
Number	NA	NA	112	131	792	1,031	820.54%
Amount	NA	NA	\$17,405	\$27,283	\$110,804	\$146,283	740.47%

NA – Not Applicable

Source: Data Request CS-24 and Auditor Analysis

The higher gross write-off ratios shown in Exhibit VIII-5 impact the cash flow of Peoples Gas and could lead to additional borrowing. Exhibit VIII-8 shows the estimated annual savings that Peoples Gas could realize from incurring less interest expense from reduced borrowings¹³. Based on Peoples Gas' revenues and write-offs along with the panel average write-off ratios for the period 2010-2014, a median annual increase in cash flow for the period was estimated at approximately \$2.6 million. Over this period, Peoples Gas could have saved approximately \$43,000 annually in interest expense by reducing its write-off ratio to the same level as the panel average.

Timely receipt of payment for service is necessary to enhance cash flow, minimize write-offs, and lower Peoples Gas' level of borrowing needs. Arrearages should be reduced through the use of social assistance programs for low-income customers, security deposits, persistent collection of delinquent accounts, and, if necessary, termination for non-payment.

¹³ The short term borrowing interest rate at Peoples Gas is based on LIBOR plus 1.5%. The reduced borrowing was calculated by using the short term borrowing interest rate of 1.687% as of 12/9/15

Exhibit VIII – 8 Peoples Natural Gas Company LLC Annual Savings Resulting From Reduced Borrowing For The Years 2010 through 2015

Year	Revenues	Write-offs	Peoples Gas Write-Off Ratio	Panel Average Write-Off Ratio	Write-Offs at Panel Ratio	Write-Offs Difference		
2010	\$215,310,144	\$ 7,733,999	3.59%	2.40%	\$ 5,167,443	\$ 2,566,556		
2011	\$249,251,788	\$ 4,526,442	1.82%	2.03%		\$ -		
2012	\$249,666,628	\$ 691,264	0.30%	2.04%		\$ -		
2013	\$299,632,543	\$10,678,789	3.60%	1.70%	\$ 5,093,753	\$ 5,585,036		
2014	\$329,285,085	\$ 8,426,426	2.60%	2.00%	\$ 6,585,702	\$ 1,840,724		
Med	Median Difference in Write-Offs = Median Annual Increase in Cash Flow For Period							
F	otential Annual S	Savings from Re	educed Borrowing	g @ Interest Rate	of 1.687%	\$ 43,298		

Source: 2010-2014 BCS Reports on Universal Service Programs and Collection Performance, Data Request CS-72, and Auditor Analysis

4. The Peoples Companies have tracked a high amount of customer dispute causes categorized as "Other".

The Peoples Companies compile dispute data and perform a weekly analysis of this information to determine the primary causes of customer disputes in an effort to limit and prevent future customer disputes. The Peoples Companies use the following descriptors to identify the reasons for a dispute:

- Account Balance
- Authorization/ Identity Theft
- Budget
- CAP
- Collection Agency Dispute
- Contract Management
- Foreign Load
- High Bill Complaint
- Meter Accuracy/ DR Meter
- Meter Switch/ Twist
- Operations
- Other
- Portal Payment Issues
- Rates

Based on the Audit Staff's review of causal explanations, the descriptor of "Other" accounted for the following percentage of dispute reasons for the Peoples Companies in 2015:

18.5% for Peoples Gas,

- 12.8% for the Equitable Division, and
- 24% for Peoples TWP

The descriptor of "Other" accounted for the following percentage of dispute reasons for the Peoples Companies in 2010:

- 8.0% for Peoples Gas,
- 0.4% for the Equitable Division, and
- 6.3% for Peoples TWP

A timely analysis of historical customer dispute data should be performed to ensure that the primary causes to customer disputes are promptly identified. This would enable the Peoples Companies to develop the remedial actions necessary to eliminate any causes to disputes which can be prevented in the future.

The Peoples Companies used only 14 descriptors to identify the reasons for a dispute in 2015, but previously had used 46 descriptors in 2010. The Peoples Companies stated they introduced more detailed reason codes into their SAP enterprise software in 2015 to enhance its ability to monitor dispute reasons and is continuing to create new reason codes in SAP as circumstances arise; however, they are using far less than in 2010. Once a dispute is resolved, it cannot be reopened to change the reason to a newly established reason code. To remain timely in closing disputes, "Other" is selected if the new code has not been implemented prior to dispute resolution. The Peoples Companies stated that as a more robust selection of codes are available in SAP the number of "Other" reason codes is expected to drop significantly. When a large amount of customer disputes are categorized as "Other" it does not allow for the actual reasons to be addressed and minimized.

5. Meter reading errors at Peoples Gas and Peoples TWP are higher than the Equitable Division, and increased sharply at Peoples TWP during 2015.

The meter reading error rate, as shown in Exhibit VIII-9, represents the number meter read errors that occurs as a percentage of total meter reads. The Equitable Division had a zero meter reading error rate for the years 2010-2015. Meter reading errors increased at Peoples TWP from 0.04% in 2014 to 1.12% in 2015. Peoples TWP does not have historical data of meter reading errors for the years 2010-2013. The percentage of error reads at Peoples Gas increased from 0.19% in 2014 to 0.28% in 2015, which is an increase of approximately 47%. Peoples TWP's error reads increased by 28 fold from 0.04% in 2014 to 1.12% in 2015.

In May 2015 Peoples TWP transferred meter reading from its in-house staff to contractors. This increased the error rate while new personnel were trained to read meters. By November 2015, once all cycles were transferred to contractors, the error rate normalized. The Equitable Division meter reading error rate of 0.00% is most likely attributed to the implementation of AMR. Approximately 97% of Peoples Gas and

Exhibit VIII – 9 Peoples Companies Meter Reading Error Rate For The Years 2010 through 2015

	Peoples	Peoples	Equitable
Year	Gas	TWP	Division
2010	0.26%	NA	0.00%
2011	0.21%	NA	0.00%
2012	0.80%	NA	0.00%
2013	0.90%	NA	0.00%
2014	0.19%	0.04%	0.00%
2015	0.28%	1.12%	0.00%

NA – Not available because there was no historical data

Source: Data Request CS-27

Peoples TWP meters are read by handheld meter reading units and the other 3% of meters are equipped with AMR. The Peoples Companies have a meter reading accuracy rate goal of 99.6% and an APIP of 99.5%. The responsibility for meeting the meter reading goal and APIP falls on the Billing Department who in turn holds the meter reading contractors accountable for this performance. Peoples TWP was the only one of the Peoples Companies that was below these target levels achieving performance at 98.88%. Consequently, Peoples Gas and Peoples TWP should be able to achieve the Equitable Division's meter reading error rate of 0% if the Peoples Companies were to implement AMR/smart meter technology. The Peoples Companies filed an Amended Second Revised LTIIP with the Commission on April 11, 2016, which included a smart meter plan which proposes a five-year program (2016-2020) that would equip all residential and commercial meters with AMR/smart meter technology.

There appears to be a direct correlation between the meter reading error rate and the billing error rate. Peoples, Peoples TWP, and the Equitable Division's billing errors are shown in Exhibit VIII-10. Each of the Peoples Companies experienced an increase in cancel/rebills for several months after conversions to the SAP enterprise software. These conversions took place in the following months: Peoples Gas in July 2011, Peoples TWP in January 2014, and the Equitable Division in July 2015. The Equitable Division currently uses a fully deployed AMR/smart meter technology that has resulted in lower billing errors in all six years.

Large amounts of billing errors create billing lag that can lead to delayed and disputed payments resulting in additional handling/processing expenses, and a decrease in cash flow. If Peoples and Peoples TWP were to maintain a level of monthly billing errors similar to the levels achieved by the Equitable Division during the years 2011-2015, the Audit Staff estimates that Peoples Gas and Peoples TWP could have realized annual savings of approximately \$35,000 and \$10,000, respectively, in avoided interest expense by improving cash flow. This quantification was based upon the average monthly billing amounts and average billing lags that existed during the period at an average short-term borrowing rate of 1.687%.

Exhibit VIII – 10 Peoples Companies Billing Error Rate For The Years 2010 through 2015

	Peoples Gas											
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
2010												
2011							1.62%	5.11%	1.97%	1.84%	5.22%	5.11%
2012	3.68%	2.36%	2.26%	1.51%	3.02%	3.01%	2.84%	3.25%	3.62%	4.26%	2.15%	1.83%
2013	1.54%	1.65%	1.64%	2.31%	1.40%	1.67%	1.75%	1.79%	1.41%	1.28%	0.99%	0.75%
2014	0.80%	0.74%	0.95%	1.53%	1.70%	2.31%	2.42%	2.58%	2.00%	1.60%	1.26%	0.88%
2015	0.88%	0.95%	1.00%	1.21%	1.64%	1.60%	1.72%	1.97%	2.16%	1.83%	1.33%	1.09%
					Pe	eoples T	WP					
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
2010												
2011												
2012												
2013												
2014	4.91%	23.09%	3.00%	0.94%	0.76%	1.88%	2.19%	2.55%	2.11%	1.45%	0.77%	0.79%
2015	0.73%	1.71%	1.22%	0.97%	1.44%	1.58%	1.46%	3.29%	4.57%	5.41%	3.17%	1.33%
					Equi	itable Di	vision					
Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
2010	0.22%	0.19%	0.43%	0.46%	0.51%	0.47%	0.47%	0.38%	0.35%	0.35%	0.29%	0.24%
2011	0.30%	0.36%	0.27%	0.28%	0.34%	0.37%	0.35%	0.39%	0.35%	0.29%	0.26%	0.24%
2012	0.23%	0.24%	0.29%	0.36%	0.43%	0.41%	0.36%	0.34%	0.31%	0.36%	0.31%	0.24%
2013	0.21%	0.19%	0.23%	0.31%	0.43%	0.58%	0.32%	0.33%	0.29%	0.34%	0.29%	0.15%
2014	0.20%	0.19%	0.22%	0.29%	0.45%	0.50%	0.31%	0.39%	0.37%	0.38%	0.27%	0.22%
2015	0.24%	0.20%	0.23%	0.35%	0.50%	0.64%	0.31%	0.77%	0.58%	0.60%	1.09%	0.68%

Source: Data Request CS-2

Recommendations

- 1. Accelerate efforts to eliminate inside meter sets to comply with PUC regulations.
- 2. Expedite the implementation of a uniform TOS program for the Peoples Companies.
- 3. Study potential solutions to reduce arrearages and minimize write-offs.
- 4. Improve the identification of dispute causes by using the 2010 dispute reason codes in order to minimize the number of future customer disputes.
- 5. Implement AMR/smart meter technology as planned to minimize meter reading and billing errors.

IX. EMERGENCY PREPAREDNESS

Background

Effective June 2005, Public Utility Commission (PUC or Commission) regulations at 52 Pa. Code § 101 (Chapter 101) require jurisdictional utilities to develop and maintain written physical security, cyber security, emergency response, and business continuity plans in order to protect the infrastructure within the Commonwealth of Pennsylvania and ensure safe, continuous and reliable utility service. Along with the requirement to establish these "emergency preparedness" plans, a utility is required to annually file a Self Certification Form to the Commission documenting compliance with Chapter 101. This form, available on the PUC website, is comprised of 13 questions as shown in Exhibit IX-1.

Exhibit IX – 1
Pennsylvania Public Utility Commission
Public Utility Security Planning and Readiness Self Certification Form

Item No.	Classification	Response (Yes-No-N/A*)
1	Does your company have a physical security plan?	1.
2	Has your physical security plan been reviewed in the last year and updated as needed?	2.
3	Is your physical security plan tested annually?	3.
4	Does your company have a cyber security plan?	4.
5	Has your cyber security plan been reviewed in the last year and updated as needed?	5.
6	Is your cyber security plan tested annually?	6.
7	Does your company have an emergency response plan?	7.
8	Has your emergency response plan been reviewed in the last year and updated as needed?	8.
9	Is your emergency response plan tested annually?	9.
10	Does your company have a business continuity plan?	10.
11	Does your business continuity plan have a section or annex addressing pandemics?	11.
12	Has your business continuity plan been reviewed in the last year and updated as needed?	12.
13	Is your business continuity plan tested annually?	13.

^{*} Attach a sheet with a brief explanation if N/A is supplied as a response to a question.

Source: Public Utility Security Planning and Readiness Self-Certification Form, as available on the PUC website at http://www.puc.state.pa.us/general/onlineforms/pdf/Physical_Cyber_Security_Form.pdf.

During the course of our fieldwork, the Audit Staff reviewed the most recent (i.e., 2015) Self Certification Forms submitted by Peoples Natural Gas Company LLC (Peoples Gas), Peoples Natural Gas Company LLC – Equitable Division (Equitable Division) and Peoples TWP LLC (Peoples TWP), collectively referred to as the Peoples Companies, to determine the status of their responses. In addition, there are various shared services among the three entities. Our examination of the Peoples Companies' emergency preparedness included a review of physical security plans (PSP), cyber security plans (CSP), emergency response plans (ERP), business continuity plans

(BCP), and associated security measures. In addition, the Audit Staff performed inspections at a sample of the Peoples Companies' facilities; including headquarters, service centers, operation center(s), and warehouses. Due to the sensitive nature of the information reviewed, any specific information is not revealed in this report but rather the generalities of the information reviewed are summarized.

Each of the plans is governed by an all-encompassing Incident Management Plan "to ensure organized response and recovery for any unplanned major event that disrupts multiple normal business operations and further provides structure for managing and coordinating the Company's four individual incident plans." The purpose of the Incident Management Plan is to identity critical business functions and strategies for response and recovery; identify guidelines for different types of alerts; set activation levels for specific triggers; define team member responsibilities and tasks; and establish event agendas. The Incident Management Team organization shown in Exhibit IX-2 includes an Incident Manager, Safety Officer, Communication Officer, Emergency Response Manager, Business Continuity Manager, Physical Security Manager and Information Technology (IT) Cyber Security Manager.

Exhibit IX – 2
Peoples Companies
Incident Management Team Organization Chart
As of March 2016



Source: Data Request EP 11

The individual incident plans are overseen and managed by various Peoples Gas, Equitable Division, and Peoples TWP groups and individuals to provide overarching support to each of the Peoples Companies. These groups are responsible for testing, reviewing, and updating their respective plan(s). The individuals and groups assigned to the PSP, CSP, ERP, and BCP along, with the purpose of each, are as follows:

- Physical Security Plan Director, Safety & Training (Peoples Gas) to educate and prevent security breaches to the Company's facilities or assaults on its employees.
- Cyber Security Plan Director, IT Cyber Security & Infrastructure (Peoples Gas) – to respond efficiently and effectively to minimize risks to business and customers by creating a dedicated response team with carefully designed and well-maintain incident response procedures.
- Emergency Response Plan Director, Gas Operations (Peoples Gas) to outline the procedures, guidelines, organizational support and communication that will minimize or prevent hazard to people, property and the environment during an emergency.
- Business Continuity Plan Director, IT Cyber Security & Infrastructure (Peoples Gas) – to ensure organized response and recovery for any unplanned event that disrupts normal business operations, which include loss of utility service, loss of access to any buildings or any catastrophic event.

To constantly protect physical and cyber resources, the designated groups and individuals have developed procedures to ensure that Peoples Gas, the Equitable Division and Peoples TWP operate in a safe, secure, and reliable environment. A major commitment in assuring plans are kept current is by performing various testing on an annual basis. Types of testing performed by the Peoples Companies include vulnerability assessments, penetration tests, system operational testing, table top emergency simulations, media backups, and real-life events.

Findings and Conclusions

Our examination of the Peoples Companies' Emergency Preparedness included a review of the physical security plan, cyber security plan, emergency response plan(s) and business continuity plan, vulnerability assessment and all associated security measures. Based on our review the Peoples Companies' emergency preparedness efforts, no evidence came to our attention that would lead the Audit Staff to conclude that the areas reviewed were not being addressed adequately.

Recommendation

None.

X. HUMAN RESOURCES

Background

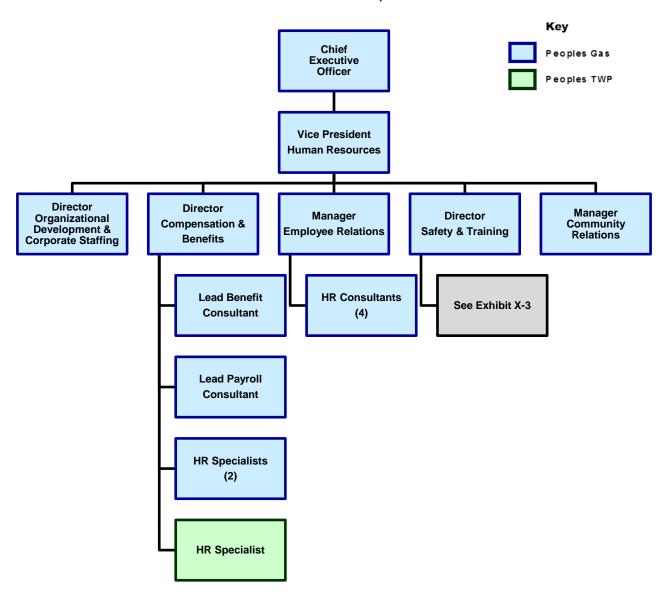
As discussed in Chapter II – Background, Peoples Service Company LLC (PSC) provides services for Peoples Natural Gas Company LLC (Peoples Gas), Peoples Natural Gas Company LLC – Equitable Division (Equitable Division), and Peoples TWP LLC (Peoples TWP), collectively called the Peoples Companies, which is indirectly controlled by SteelRiver Infrastructure Partners LP (referred to as SteelRiver, see Chapter II - Background). In the case of the Human Resources (HR) function, Peoples Gas and Peoples TWP perform HR related work on behalf of PSC with employees from the respective natural gas distribution companies (NGDC).

Exhibit X-1 displays the HR organizational structure at the Peoples Companies. Reporting to the Chief Executive Officer is the Vice President of Human Resources. Reporting to the Vice President of Human Resources are five positions: the Director of Organizational Development and Corporate Staffing is responsible for project management, organizational development, training, HR soft skills, performance management and workforce planning; the Director of Compensation and Benefits is responsible for the Human Resources Information System (HRIS) and is also responsible for benefits, payroll, administration, and compensation; the Manager of Employee Relations, responsible for union and corporate position related needs and who also contributes to diversity related functions; the Director of Safety and Training; and the Manager of Community Relations is responsible for all community interaction related issues for the Peoples Companies.

All positions, with one exception, in the HR Department are Peoples Gas employees. The remaining position is an employee of Peoples TWP. As discussed in Chapter II – Background, Peoples Gas was formally owned, through subsidiaries, by Dominion Resources, Inc. (Dominion). All HR functions under Dominion ownership were performed by a service company owned by Dominion and were not performed by Peoples Gas. Once acquired by SteelRiver, a stand-alone HR Department was formed at Peoples Gas. After SteelRiver's acquisition of what is now called Peoples TWP, the one HR position from Peoples TWP was added to the HR Department.

Year-end staffing levels at the Peoples Companies are displayed in Exhibit X-2. Significant staffing changes to Peoples Gas occurred starting in February of 2010 due to the SteelRiver acquisition of Peoples from Dominion. Previously customer service functions for Peoples Gas were outsourced under Dominion. Upon the acquisition by SteelRiver, this function was brought in-house and customer service employees were added. As shown in Exhibit X-2, notable staffing levels increases occurred in following Peoples Gas departments: Gas Operations, Controllers, Information Technology, Rates and Regulatory, Sales and Marketing, and Human Resources. Aside from these additions to Peoples Gas in 2010, significant staffing changes also occurred from the acquisitions of what are now known as Peoples TWP and the Equitable Division.

Exhibit X – 1
Peoples Companies
Human Resources Organization Structure
As of December 31, 2015



Source: Data Request EM-2

Exhibit X – 2
Peoples Companies and Peoples Service Company
Staffing History
End of Year for 2010 through 2015

Peoples Gas	2010	2011	2012	2013	2014	2015
Bus Dev / Gas Supply	12	6	9	0	0	6
Community Relations	0	0	0	2	2	3
Controllers	9	21	17	18	20	20
Customer Experience	0	0	0	0	0	105
Customer Service	30	72	73	71	83	0
Executive	8	7	7	7	9	9
Gas Operations	471	542	589	593	570	483
Human Resources	10	14	16	12	12	14
Information Technology	20	34	37	34	52	50
Legal	4	0	0	0	0	0
Rates & Regulatory	10	13	14	17	20	22
Sales & Marketing	0	8	7	0	0	0
Treasury	3	0	7	7	8	9
Total Peoples Gas	577	717	776	761	776	721
Peoples TWP	2010	2011	2012	2013	2014	2015
Bus Dev / Gas Supply			2	0	0	2
Community Relations			0	0	0	1
Controllers			4	3	2	2
Customer Experience			0	0	0	16
Customer Service			21	18	14	0
Executive			2	2	0	1
Gas Operations			169	169	164	142
Human Resources			1	1	1	1
Information Technology			1	1	2	2
Rates & Regulatory			2	1	1	1
Total Peoples TWP			202	195	184	168
Equitable Division	2010	2011	2012	2013	2014	2015
Customer Experience					0	65
Customer Service					19	17
Gas Operations					220	143
Information Technology					0	2
Total Equitable Div					239	227
Peoples Service Company	2010	2011	2012	2013	2014	2015
Customer Service						114
Total Peoples Service Compay						114
Peoples Companies + PSC	2010	2011	2012	2013	2014	2015

Source: Data Request EM-5

Although it appears a reduction in positions occurred in 2015 for both gas operations and customer service, a net gain of 15 positions actually occurred as positions were transferred into the newly formed customer experience function while the remaining customer service positions were transferred into PSC.

The Peoples Companies HRIS is a SAP enterprise software module used for reporting HR activities. Standard HR reports that can be generated include, but are not limited to: benefits and payroll, tax filings, leave and attendance, employee information, time reporting, performance reviews, hiring, transfers, retirements, terminations, and travel reporting. Additionally, HR staff can modify existing reporting tools to design customized reports to extract specifically needed information from the HRIS.

There is one consistent set of HR policies and procedures for the Peoples Companies. In addition to the standard policies and procedures that the Audit Staff typically reviews during an audit, the Peoples Companies also had the following somewhat unique policies and procedures:

- Perfect attendance incentives.
- Standards for employee electronic and social media communications.
- Spot awards for performance beyond expectation.
- Vacation donation for employees who have extended health issues.
- Volunteer time allowance for approved activities.

When the field work for this management audit began in August of 2015, there were three unions which represented field operations positions and two unions which represented back office positions such as customer service, billing, credit and administrative positions. The field positions were represented by three different unions for each of the Peoples Companies, since each union existed prior to the acquisitions of Peoples TWP and the Equitable Division. As of the end of April of 2016, the three unions agreed to terms with the Peoples Companies to become represented by one union (i.e., Utility Workers Union of America – Local 666) and now have one contract to cover all of the field positions for the Peoples Companies. The two unions which represent customer service representatives specifically represent employees who previously worked for the NGDC which is now the Equitable Division.

The Peoples Companies' employee benefits are generally universal for all employees (i.e., union, exempt, and executives), with the exception of some benefits which are different for specific unions. Due to SteelRiver's multiple acquisitions within recent years, there were up to eight different benefits packages available to Peoples Companies employees. In time, the Peoples Companies hope to consolidate the multiple packages. Because the union contract was ratified the last week of field work in April 2016, the Audit Staff was unable to ascertain and analyze the benefit plan offered under the new contract for the UWUA Local 666. Before the field operations union consolidations, the eight different packages applied to the following groups:

- Peoples Gas Union UWUA Local 666
- Peoples Gas Union UWUA Local 666 WV

- Peoples TWP Union UWUA Local 242
- Equitable Division Union USW Local12050
- Equitable Division Union IBEW Local 1956
- Non-Union Peoples Gas
- Non-Union Peoples TWP
- Non-Union Equitable Division

The following employee benefits are offered to the Peoples Companies employees and were found to be generally comparable to industry norm:

- Choice of two health plan designs
- Dental insurance
- Vision insurance
- Dependent day care flexible spending account
- Long term disability
- Life insurance (with optional additional life insurance and accidental death and dismemberment if desired)
- 401k savings plans
- Defined benefit plans for certain union employees of Peoples TWP and retirees of Peoples Gas and the Equitable Division¹⁴
- Medical savings accounts
- Adoption assistance
- Tuition assistance
- Gas appliance reimbursements

The foundation of the Peoples Companies' compensation philosophy is to reward performance based on individual, business unit and corporate results which are reflected in both base (i.e., merit) and variable (i.e., incentive or bonus) pay. The Peoples Companies determine compensation levels and hourly rates (i.e., standard rates) through market pricing. The process begins with the participation in a variety of compensation surveys from various major consulting companies. The survey data is analyzed at the median (50th percentile) to assist in determining an appropriate standard rate for respective positions. Employees have the ability to achieve additional compensation based on business unit, corporate, and individual performance. The Peoples Companies generally target compensation with a 15% variance from the 50th percentile (85% to 115% of standard rate); however they will occasionally compensate outside of this 15% range when warranted.

To encourage pay for performance, the Peoples Companies offer incentive pay via the Annual Performance Incentive Plan (APIP). The incentive pay is distributed from two incentive pools – the "base" pool and the "surplus" pool. The base pool is a percentage of the eligible employee base salary determined by the employee's

¹⁴ There is a frozen defined benefit plan that covers certain active Peoples TWP union employees. In addition, the Peoples Companies are obligated to ensure two other defined benefit plans for retirees of Peoples Gas and the Equitable Division are properly funded.

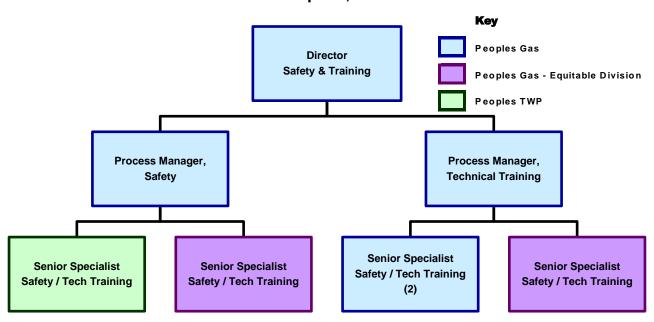
attainment of individual and/or group objectives termed "Value Drivers". The surplus pool is funded based on the attainment of performance objectives above plan levels (i.e., above 100% attainment) and any base pool amounts not paid out due to employees not achieving personal or group Value Drivers. Available dollars are in part determined by Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA). Incentive goals are different for each employee depending upon the position of the employee and department goals established by the executives (referred to as officers) at the Peoples Companies. For example, all employees have safety goals as part of their APIP but the percentage and amount of their incentive vary depending on position.

The Audit Staff reviewed individual compensation levels at the Peoples Companies which included positions from the Peoples Gas, the Equitable Division, and Peoples TWP. Corporate level, management level, and non-management level positions were all included as part of this review. Among the positions reviewed, there were various examples of employees which were paid below, at, and above the market rates which reflect the Peoples Companies' compensation philosophy. Additionally, various degrees of APIPs were earned in the compensation levels reviewed. Based on this sample, it appears that the Peoples Companies are compensating employees based on established compensation objectives.

At the Peoples Companies, safety is the responsibility of the Director of Safety and Training. Exhibit X-3 displays the structure for the Safety and Training Department. Reporting to the Director Safety and Training are two positions: the Process Manager for Safety who is responsible for Occupational Safety and Health Administration (OSHA) requirements, investigations, and safety programs; and the Process Manager for Technical Training who is responsible for the training aspects of the safety program. These positions have safety technical positions from Peoples Gas, the Equitable Division, and Peoples TWP as direct reports. This reporting structure is new as of April 1, 2016. Previous to this structure, the Director of Safety and Training had responsibilities in addition to safety and reported to a different position than the Vice President of Human Resources.

Safety programs historically have existed at Peoples Gas, the Equitable Division, and Peoples TWP, but due to the recent SteelRiver acquisitions, these safety programs have been consolidated into one safety program with the best practices taken from each NGDC. These practices were then combined with additional American Gas Association (AGA) best practices. There is a shared safety manual that describes the guidelines for safety practices for all employees, regardless of which company or division the employee resides. As of August 2015, however, each union had its own respective safety committee due to contract related issues. Additionally, there was a universal steering committee which provided direction for safety for all three unions. Because the new field union contract was ratified at the end of our field work in April 2016, the Audit Staff was unable to review or summarize the changes made to the safety and steering committees since the merger of the field unions.

Exhibit X – 3
Peoples Companies
Safety and Training Department Organization
As of April 1, 2016



Source: Data Request HR-30 and April 2016 update to EM-2.

The Peoples Companies maintain 26 different active safety initiatives and accident prevention programs which help to direct and enhance the safety program. A sample of some of these programs is as follows:

- Weekly supervisor safety meetings.
- Weekly injury and accident review call (e.g., OSHA, preventable accidents, damage prevention, near misses, etc.). The group has a weekly conference call meeting with approximately 120 employees.
- Personal Protective Equipment flame retardant clothing, etc.
- Safety alerts / bulletins rapid distribution of a warning or bulletin via e-mail with additional details to follow.
- Coaching sessions of employees with multiple injuries. If there are multiple notable accidents within the last 5 years, coaching sessions will occur with employees in effort to reduce the chances of injury in the future.
- Lifesaving rules there is heavy emphasis on four areas:
 - Accidental ignition of natural gas
 - Asphyxiation in an oxygen deficient environment
 - o Trench cave-ins
 - Seat belts for motor vehicle accidents

- Major events are covered specifically as they occur.
- Pre job briefings occur any time there is two or more people on the job. This
 is basically reviewing the hazards at the job site.
- Take 5 this occurs for employees working alone, a five step process to confirm work procedures and identify and mitigate hazards. Assessing the situation includes identifying hazards such as routes, dogs, poisonous plants, etc.
- Fire school at the McKeesport training center.
- Union management safety committees senior union leadership and management on steering committees.
- Bad month / stand down days occurs after there have been multiple accidents in a short time frame.
- Facility audits each shop is audited at least every three years with larger locations visited bi-monthly as well as an annual safety audit.
- Motor vehicle accidents 360 Circle for Safety Magnet Program a walk around on the vehicle to inspect before driving.
- Safety culture survey reviewed the Peoples Companies' programs to that of the AGA Best Practices.

To measure the success of the program, the Peoples Companies compare their performance relative to an AGA panel of similar utilities striving to achieve top quartile performance of the panel. There are three safety metrics measured by the Peoples Companies:

- OSHA Safety Rate OSHA reportable incidents in the period per 100 employees. OSHA recordable injuries are accidents that result in medical treatment, at least one day of lost time, restricted duty besides the day of injury or a fatality.
- Restricted days / lost days (RD/LD) Rate The measure of days away, restricted work or transferred incidents per 100 employees.
- Motor Vehicle Accidents Number of fleet vehicle accidents

The Pennsylvania Public Utility Commission (PUC or Commission) has encouraged utilities to proactively improve diversity in their workforce and purchasing efforts for more than two decades. In March of 1992, the Commission issued a

Secretarial letter directing all jurisdictional utilities affected by Section 516 of the Public Utility Code (i.e., utilities whose plant-in-service exceeds \$10 million) to file quarterly diversity status reports with the Commission. In May of 1994, the Commission issued an Order directing Section 516 utilities to file diversity status reports semi-annually rather than quarterly, to submit Equal Employment Opportunities plans annually, and to file certain diversity procurement data. In February 1995, the Commission adopted Chapter 69 regulations which encouraged utilities to include diversity efforts as a component of their business strategy. Later, in March of 1997, the Commission's diversity filing requirements changed from semi-annual to annual.

As of April 2016, Peoples Gas and Peoples TWP filed separate annual diversity reports to the Commission (the Peoples Gas report includes information for the Equitable Division). Included in the diversity reports are sections related to the diversity policies related to HR and procurement. The Peoples Companies have a discrimination policy and a complaint procedure which are outlined in its HR Policies and Procedures.

Diversity at the Peoples Companies is the responsibility of the Manager of Labor Relations (see Exhibit X-1). More specifically, the Manager of Labor Relations is responsible for Affirmative Action Plan programs and goals as well as employee recruiting, retention, and development. Diversity procurement and minority vendor use is the responsibility of the Manager of Supply Chain (see Chapter XI – Materials Management, Exhibit XI-1; also a brief overview of how diversity vendors are incorporated into purchasing at the Peoples Companies is included in the background of Chapter XI). The Peoples Companies partner with targeted schools and universities and other numerous groups to reach diverse candidate pools via job fairs (including diversity specific fairs), advertising, newsletters, internet, and other outlets. Additionally, the Peoples Companies have and plan to continue to employ intern positions during the summer and part-time through the year. The Peoples Companies ensure that access to training and opportunities are provided to diverse candidates as well. The Peoples Companies have a Diversity and Inclusion Committee with all departments represented. Diversity related programs, promotions, and utilization at the Peoples Companies are routinely monitored with monthly, quarterly, and annual reports.

Findings and Conclusions

Our examination of the HR function included a review of the Peoples Companies' HR information systems, policies and procedures, safety programs, training, compensation, benefits, and diversity programs. Based on our review of the HR function, the Peoples Companies should initiate or devote additional efforts to improving the efficiency and/or effectiveness of the Peoples Companies' HR areas by addressing the following:

1. Peoples TWP is repeatedly not meeting its established safety goals nor achieved safety performance levels comparable to a panel average of similar AGA companies.

The safety performance of the Peoples Companies relative to their established safety goals is presented in Exhibit X-4. The Peoples Companies formulate their goals based on historical AGA reported peer group data modified annually based on their actual performance, changes in the industry, and the realistic ability to meet these goals. Previous to 2012, the levels were based on results in the lower third quartile of the AGA peer group. In 2012, the goal was the 50th percentile of the AGA peer group. For 2013 and 2014, the target was changed to the top quartile of the AGA peer group. In 2015, this target was lowered to the top third of the AGA peer group. It should be noted that SteelRiver did not acquire Peoples TWP until May of 2011 and the Equitable Division until December of 2013.

Exhibit X – 4
Peoples Companies
Safety Metrics Performance vs. Company Goals and Panel Average
For the Years 2011 through 2015

	COLLA Barrantalda la sidanta									
	OSHA Reportable Incidents									
	2011	2012	2013	2014	2015					
Peoples Gas	1.82	1.84	2.17	2.20	1.13					
Equitable Division	4.02	3.23	6.54	2.53	2.62					
Peoples TWP	5.47	4.61	5.01	4.36	5.97					
Combined Data	3.10	2.66	3.64	2.59	2.16					
Target Goal	3.82	3.66	1.85	1.85	1.22					
Panel Average	3.44	3.25	3.05	3.20	NA					
	RD/LD Injuries									
	2011	2012	2013	2014	2015					
Peoples Gas	1.52	0.79	1.27	1.16	0.25					
Equitable Division	1.15	1.17	1.31	1.44	1.50					
Peoples TWP	1.82	1.38	1.50	1.63	4.89					
Combined Data	1.47	0.99	1.32	1.30	1.20					
Target Goal	2.01	2.08	0.92	0.92	2.21					
Panel Average	2.24	2.02	1.96	2.19	NA					
Preventable Motor Vehicle Accidents										
	2011	2012	2013	2014	2015					
Combined Data*	16	14	21	21	24					
Target Goal	14	NA	22	28	28					

NA – Not available

2012, Peoples Gas and Peoples TWP

2013 – 2015, Peoples Gas, Peoples TWP, and Equitable Division

Source: Data Request HR-25

Although Peoples Gas did not achieve the OSHA Reportable Incident Rate and RD/LD Injuries Rate goals for the years 2013 and 2014, the Company has performed better than the AGA panel average for the period reviewed. Likewise, the Equitable

^{*} Combined data for PMVA: 2011, Peoples Gas only

Division has not achieved the OSHA Incident Rate goal since being acquired by Peoples Gas (i.e., years 2014 and 2015) and did not achieve the goal for RD/LD Injuries Rate in 2014. However, the Equitable Division has performed better than the AGA panel average in 2014 for both metrics. The AGA panel data for 2015 was not available at the time of the management audit. Peoples TWP has not achieved its OSHA Incident Rate goal since being acquired (i.e., years 2012-2015) and only achieved the RD/LD Injuries Rate goal in 2012. In addition, Peoples TWP has not performed as well as the AGA panel average for the OSHA Incident Rate during the same period; however, it has performed better than the AGA panel average with respect to the RD/LD Injuries Rate goal. Based on the consolidated data reported for Preventable Motor Vehicle Accidents (PMVA), the Peoples Companies have achieved this safety goal since each NGDC has been acquired by SteelRiver.

To better understand why Peoples TWP specifically was not achieving safety performance goals and performing generally worse than the AGA panel average for OSHA reportable incidents, the Audit Staff requested OSHA reportable cause data. Exhibit X-5 displays causal analysis for Peoples Gas, the Equitable Division, and Peoples TWP from 2011 to 2015. Note that not all years displayed were under SteelRiver ownership for Peoples TWP and the Equitable Division but they are displayed for historical reasons. Causal analysis shows that the majority of OSHA related injuries are sprains and animal bites / stings. For Peoples TWP, this is approximately 70% of the cases.

In general, the Peoples Companies have a robust safety program and the majority of OSHA reportable incidents are not related to serious injuries. With this in consideration, however, the number of injuries that occurred was enough to impact Peoples TWP's ability to achieve its goal of top third quartile performance or meet the AGA panel average.

The Peoples Companies should be striving to achieve the goals it has established for the safety metrics of the respective companies. Although goals may not always be met, the Companies should utilize the AGA panel average performance as an industry proxy to determine if actions should be promulgated to improve performance. Programs should be specifically designed to reduce injuries that can be encountered during work, such as sprains and insect bites. Additionally, with the merger of the field unions for Peoples Gas, the Equitable Division, and Peoples TWP, the Peoples Companies should take that opportunity to evaluate any cultural or company or division specific practices that may influence OSHA reportable incident results.

Recommendation

1. Continue to monitor training, methodologies, equipment and ergonomic needs which address the primary causes of accidents and initiate changes or introduce new programs as needed.

Exhibit X – 5
Peoples Companies
Causal Analysis for OSHA Reportable Incidents
For the Years 2011 through 2015

Peoples Gas								
Cause	2011	2012	2013	2014	2015	2011 - 2015 Average	Average %	
Sprains	8	4	7	8	3	6.0	42.9%	
Fractures	3	1	1	0	1	1.2	8.6%	
Cuts, Lacerations, Punctures	1	5	2	5	1	2.8	20.0%	
Abrasions, Scrapes	0	0	0	0	0	0.0	0.0%	
Bruises, Contusions	0	0	1	1	1	0.6	4.3%	
Cumulative Trauma	0	0	1	1	0	0.4	2.9%	
Animal Bites, Stings	0	1	2	1	2	1.2	8.6%	
Skin Irriration	1	1	1	0	0	0.6	4.3%	
Eye	0	1	1	0	1	0.6	4.3%	
Motor Vehicle Accident	0	1	1	1	0	0.6	4.3%	
Hearing Loss	0	0	0	0	0	0.0	0.0%	
Other	0	0	0	0	0	0.0	0.0%	
Totals	13	14	17	17	9	14.0	100.0%	

			Equitable	Division			
Cause	2011	2012	2013	2014	2015	2011 - 2015 Average	Average %
Sprains	3	2	2	2	2	2.2	19.0%
Fractures	0	2	2	1	0	1.0	8.6%
Cuts, Lacerations, Punctures	2	0	0	0	1	0.6	5.2%
Abrasions, Scrapes	0	0	1	0	0	0.2	1.7%
Bruises, Contusions	1	1	0	0	1	0.6	5.2%
Cumulative Trauma	0	0	0	0	0	0.0	0.0%
Animal Bites, Stings	4	5	10	1	0	4.0	34.5%
Skin Irriration	0	0	1	0	1	0.4	3.4%
Eye	2	0	0	2	0	0.8	6.9%
Motor Vehicle Accident	0	0	0	0	2	0.4	3.4%
Hearing Loss	0	1	4	0	0	1.0	8.6%
Other	1	0	0	1	0	0.4	3.4%
Totals	13	11	20	7	7	11.6	100.0%

Peoples TWP							
Cause	2011	2012	2013	2014	2015	2011 - 2015 Average	Average %
Sprains	3	3	5	1	6	3.6	35.3%
Fractures	0	0	0	1	1	0.4	3.9%
Cuts, Lacerations, Punctures	0	1	0	1	1	0.6	5.9%
Abrasions, Scrapes	0	0	0	0	0	0.0	0.0%
Bruises, Contusions	1	0	1	0	0	0.4	3.9%
Cumulative Trauma	0	0	0	0	0	0.0	0.0%
Animal Bites, Stings	5	4	3	3	2	3.4	33.3%
Skin Irriration	0	0	0	0	0	0.0	0.0%
Eye	1	0	1	0	1	0.6	5.9%
Motor Vehicle Accident	1	2	0	2	0	1.0	9.8%
Hearing Loss	1	0	0	0	0	0.2	2.0%
Other	0	0	0	0	0	0.0	0.0%
Totals	12	10	10	8	11	10.2	100.0%

Source: Data Request HR-24

XI. PURCHASING AND MATERIALS MANAGEMENT

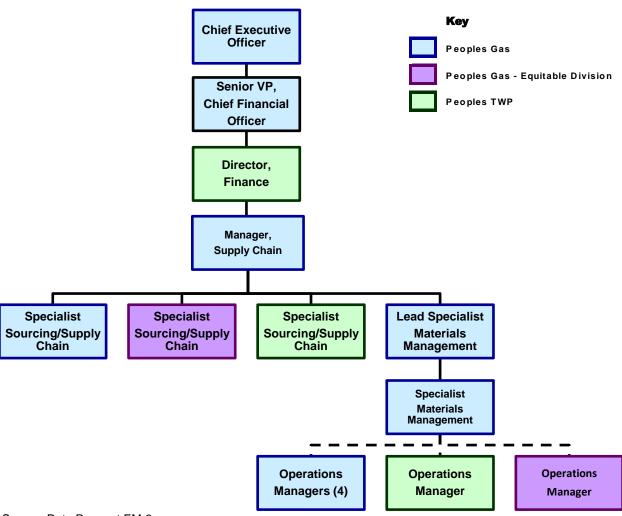
As discussed in Chapter II – Background, Peoples Service Company LLC (PSC) provides services for Peoples Natural Gas Company LLC (Peoples Gas), Peoples Natural Gas Company LLC – Equitable Division (Equitable Division), and Peoples TWP LLC (Peoples TWP), collectively referred to as the Peoples Companies, which are natural gas utility operating companies indirectly controlled by SteelRiver Infrastructure Partners LP (referred to as SteelRiver). In the case of the purchasing and materials management functions, Peoples Gas and Peoples TWP employees perform related work on behalf of PSC.

Exhibit XI-1 displays the Supply Chain Management Department (SCM) organization structure for the Peoples Companies. Reporting to the Director of Finance is the Supply Chain Manager who has both purchasing and materials management related reporting positions and is the head of the SCM Function. The purchasing responsibilities are covered by three Sourcing/Supply Chain Specialists while the materials management related responsibilities are under the direction of the Materials Management Lead Specialist. A Specialist for Materials Management reports to the Lead Specialist. There is a "dashed line", or indirect, reporting relationship between the Specialist for Materials Management and the six Operations Managers who ultimately have warehouse responsibilities in the Peoples Companies' service territory.

Exhibit XI-2 displays a sample of the dashed line reporting relationship between the Specialist for Materials Management and an Operations Manager. Each Operations Manager is responsible for a designated division within the service territory for each of the respective Peoples Companies. For example, the Operations Manager for the Pittsburgh Division has two Supervisors as direct reports, one from the Equitable Division and one from Peoples Gas, and each supervisor has a Warehouse Manager reporting to each of them. With the ratification of the new union contract in April 2016 for field operations employees (See Chapter X – Human Resources), it is likely that there will be some redistricting, combining, or closing of warehouses; however, as of April 1, 2016, this was still undecided. As of April 1, 2016, the Peoples Companies warehouse locations were as follows:

- Peoples Gas Warehouses
 - Altoona
 - Gibsonia
 - Greene County
 - Greensburg
 - Grove City
 - Hopewell
 - Johnstown
 - Kiski
 - Monongahela
 - Valley
 - Wilkinsburg

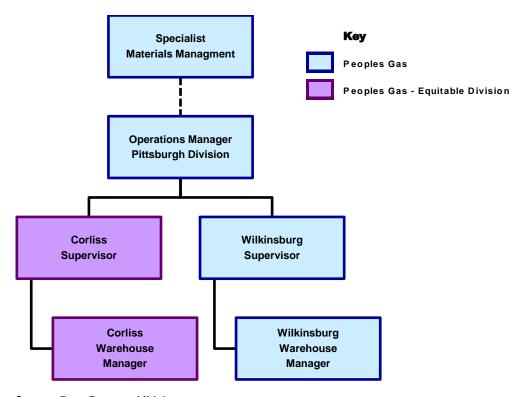
Exhibit XI – 1 Peoples Companies Supply Chain Management Organization Structure As of April 1, 2016



Source: Data Request EM-2

- Equitable Division Warehouses
 - Corliss
 - o Etna
 - Ginger Hill
 - McKeesport
 - o Mt. Nebo
 - Waynesburg
- Peoples TWP Warehouses
 - Allegheny
 - Armstrong
 - Butler
 - o Indiana
 - Jefferson

Exhibit XI – 2
Peoples Companies
Sample of Operations Manager Reporting Structure with Warehouse Managers
As of April 1, 2016



Source: Data Request MM-6

The materials used for operations at the Peoples Companies are broken into three groupings; inventoried items (warehousing), project kitting, and expense materials. Inventoried items refer to materials that are ordered and received into the inventory as an asset. These materials are planned at every district with set replenishment points based on the usage for each district (done through a third-party vendor which is discussed later in the background). The categories of materials that are considered in this grouping are pipes, valves, risers, regulators and fittings two inches and above. The project kitting 15 process is for materials that are bought and directly consumed by planned projects (through the third-party vendor). This material is requisitioned and charged directly to the project. It never is brought into inventory as an asset. The material is segregated, grouped and marked by projects from the vendor. This reduces the need for the warehousing personnel to organize and kit the materials. Expense materials are items that are purchased and consumed directly to Operations and Maintenance cost centers. The types of materials that are in this category are fittings less than two inches (excluding pipes, valves, regulators, and risers) and safety stock items such as odd fitting items or items for emergency repairs.

¹⁵ Process in which individually separate but related items are grouped, packaged, and supplied together as one unit. The supplier then creates a customized kit that is assembled and shipped as one unit.

The Peoples Companies contract with a third-party vendor, MRC Global (MRC), to administer a significant portion of its purchasing and materials management function. MRC is completely integrated into the Peoples Companies' SCM process. Automatic order fulfillment, supplier coordination, and project kitting are some of the services provided by MRC. Economies of scale are not a concern to the Peoples Companies under the MRC integrated structure as any number of units of pipe, number of fittings, etc. can be ordered at the same price regardless of quantity. Additionally, warehousing is kept at a minimum with the use of project kitting. Furthermore, on the rare occasions that projects that do not utilize project kitting, warehousing is still minimal as this material can be sent to the warehouse a week to two weeks in advance of the project. All purchasing and use of minority or other vendors is also done through coordination with MRC¹⁶.

The purchasing and materials management software system used by the Peoples Companies is SAP based. This software interacts with and is also used by MRC. MRC generates monthly reports that are provided to the Peoples Companies; such as, minority vendor use, turnover rates, fill rates, warehouse inventory levels, etc. Peoples Gas has a long established relationship with MRC. When Peoples TWP was acquired by SteelRiver, there was a significant amount of transition needed for this distribution company, as all previous purchasing and materials management activities were performed in-house for Peoples TWP. With the transition to MRC, less warehouse space was needed at Peoples TWP. As a result, Peoples TWP converted unused portions of the Butler warehouse to modular offices to house field operations and customer experience based employees. Conversely the Equitable Division was already using MRC before it was acquired by SteelRiver, therefore there was a minimal amount of transition needed for the Equitable Division.

With some exceptions, operating departments within the Peoples Companies initiate expenditure requests over \$5,000 through SCM (some specific requests under \$5,000 will require SCM approval as well). Goods or services that are expected to be repeated procurements from the same supplier may be appropriate for a blanket purchase order. Additionally, the policies and procedures do not permit expenditure requests to be divided into separate and smaller invoiced amounts to avoid the threshold requirement for initiating requests through SCM. Standard approval authority is assigned based on position title. Titles granted standard approval authority and sample corresponding authority levels are as follows:

- \$25,000 Supervisor, Process Manager
- \$50,000 Manager
- \$250,000 Director, Superintendent
- \$2.5 million Vice President

\$10 million – Senior Vice President, Chief Operating Officer, Chief Information
 Officer

• Unlimited – Executive Officer, Chief Executive Officer, President

¹

¹⁶ Using a minority vendor via MRC would be considered second tier minority vendor use as opposed to first tier use; i.e., direct use of vendors as opposed to use of a vendor through a third party.

Due to the integrated use of MRC, material variances tend to be lower when physical counts are taken for warehousing as compared to traditional distribution company warehousing; nonetheless, the Peoples Companies have a thorough material auditing process when reviewing physical inventories. There are four different types of analyses performed during the physical inventories:

- Net Dollar Variance this analysis compares the inventory dollar value transactions recorded in the system to the physical inventory count. Over and under counts by inventory item are netted against each other.
- Absolute or Gross Dollar Variance This analysis compares the sum of the
 absolute dollar value (all values are positive) that were transacted during the
 physical inventory period. This is a better gauge of inventory accuracy and
 control in comparison to the overall net value. As an example, for Net Dollar
 Variances, if there was a +\$1,000 difference and a -\$1,000 difference, this
 would equate to \$0. However, for Absolute or Gross Dollar Variances, this
 would equate to \$2,000.
- Absolute or Gross Unit Variance This analysis is the cumulative line by line absolute difference (all values are positive) in units for each inventory item between the system and physical inventory counts. This is a better gauge of inventory accuracy and control in comparison to the overall Net and Gross Dollar Variances.
- Actual Warehouse to System Level Analysis This analysis compares the system maximum level in a stock location for planned items to the actual inventory in a stock location. This allows opportunities to lessen overall inventory.

Similar to physical inventories, inventory salvaging is minimized due to integrated MRC use at the Peoples Companies. When inventory salvaging occurs, the actual salvaging procedures depend on the commodity. For instance, steel pipe can be sold to a scrapper but outdated plastic pipe would be of little value for scrap. In this case, this pipe would be provided to the Operations Department for training purposes.

Security at the warehouses was reviewed both as a part of the Materials Management and as a broader part of the Emergency Preparedness functional review. Access to materials depends upon need of the items and position of the requesting employee. The warehouses utilized fencing, caging systems, locks (both mechanical and electronic) and video technologies.

Findings and Conclusions

Our examination of the materials management function included a review of assigned responsibilities, policies and procedures, information systems, reporting capabilities, inventory controls, inventory levels, turnover rates, and warehouse

operations. Based on our review, the Peoples Companies should devote additional efforts to improve the effectiveness of its purchasing and materials management function by addressing the following:

1. The Equitable Division and Peoples TWP have not identified which items in their respective inventory are considered emergency stock.

Emergency stock is defined as critical replacement items such that, if they were not on hand and were needed, operations may be impacted to the extent that customers may be without service. Distribution companies should have well defined emergency stock criteria and items designated as such at each warehouse in order to ensure continuous operations. Because emergency stock tends to have low turnover but is needed to be warehoused, this material should be excluded from inventory turnover calculations.

Although both Peoples TWP and the Equitable Division have and use what would be defined as emergency stock, neither entity has had their emergency stock formally identified since the SteelRiver acquisition in 2011 and 2013, respectively. The Peoples Companies state that this is due to the transition from stand-alone companies to being part of the Peoples Companies. Peoples Gas had defined emergency stock prior to the SteelRiver acquisition in 2009. The Audit Staff acknowledges a transition period was needed to fully implement Peoples Gas SCM practices; however, critical replacement items for Peoples TWP and the Equitable Division should have been identified in a timelier manner.

The lack of designated emergency stock for Peoples TWP and the Equitable Division is likely a driver for the Peoples Companies not meeting their turnover goals and achieving low turnover rates (see Finding and Conclusion No. 2). Additionally, if emergency stock is not formally identified, there is a potential for a stockout of critical material.

2. The Peoples Companies have not established inventory turnover goals based on comparisons against similarly structured distribution companies with outsourced purchasing and materials management functions.

The Peoples Companies have established a turnover goal of 1.5 turns annually. The Audit Staff noted inventory turnover levels ranging from a low of 1.12 to a high of 1.84 for Peoples Gas from 2011 to 2015; 0.90 to 1.43 for Peoples TWP from 2013 to 2015; and 0.33 for the Equitable Division in 2015. Note, however, that Peoples TWP and the Equitable Division provided inventory turnover data that includes emergency items in their calculated turnovers (see Finding and Conclusion No. 1). NGDCs have in general achieved inventory turnover levels of 2.0 to 4.0 turns annually albeit while managing their own inventory. However, because most of the Peoples Companies' high valued and fast moving material is managed and stored by MRC, the majority of the materials issued and warehoused at the Peoples Companies is slower moving and lower valued materials, which will cause the overall inventory turnover levels to be lower.

According to the Peoples Companies, their inventory turnover goal of 1.5 turns was not based upon any industry survey of utilities that manage inventory through a vendor like MRC. Instead, the Peoples Companies made a "best guess" as to what a reasonable goal should be considering their specific situation with a fully integrated third-party supplier, manager, and warehouser of inventory. The Audit Staff believes that the Peoples Companies should try to establish a goal based upon actual performance from a panel of distribution companies with similar purchasing and material acquisition agreements. Although there is no evidence that suggests to the Audit Staff that the Peoples Companies' material acquisition process is inefficient, it is difficult to fully assess the true efficiency of the Peoples Companies material acquisition process without comparison to similarly structured distribution companies.

During the last week of April 2016, a single union agreement was ratified, replacing the three former union agreements. The former agreements did not permit working across union boundaries even if there were shops between each of the Peoples Companies that were in close proximity to one another. Management indicated that it had begun preliminary shop closure analysis prior to ratification. A more precise plan can now be completed since the union agreement has been ratified. Since the Peoples Companies are currently considering redistricting as part of the new company structure effective April 1, 2016, as the merged unions now offer the opportunity for the Peoples Companies to merge or redistrict their service centers, this is an appropriate time to combine the turnover analysis with the redistricting, combination, or elimination of warehouses to provide optimal warehouse turnover. A more detailed discussion of the potential service center examination is discussed in the background section of Chapter III – Executive Management

Recommendations

- 1. Designate emergency stock for the Equitable Division and Peoples TWP.
- 2. Survey, evaluate and utilize best practices of other utilities using a thirdparty purchasing and material delivery vendor in order to determine best practices for materials management and reasonable inventory turnover performance for the Peoples Companies.

XII. INFORMATION TECHNOLOGY

Background

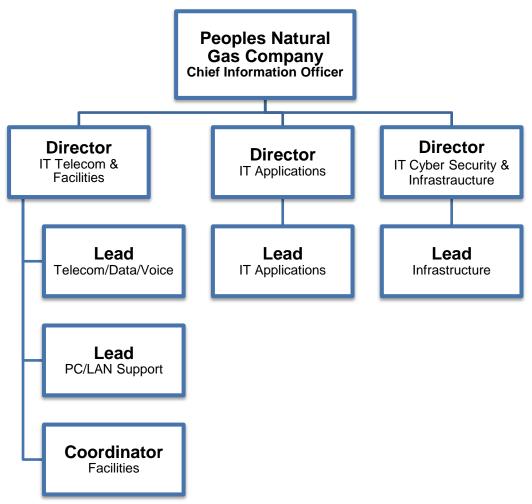
Peoples Natural Gas Company LLC (Peoples Gas), Peoples Natural Gas Company LLC – Equitable Division (Equitable Division), and Peoples TWP LLC (Peoples TWP), collectively referred to as the Peoples Companies, are natural gas utility operating companies which are indirectly controlled by SteelRiver Infrastructure Partners LP (collectively referred to as SteelRiver). The corporate entity structure for the Peoples Companies is displayed in Exhibit II-1 of Chapter II – Background. Additionally, an overview of the histories, service territories of Peoples Gas, the Equitable Division, and Peoples TWP; and the SteelRiver acquisition of each is also reviewed in Chapter II.

After the purchase by SteelRiver in 2009, there was a Transition Services Agreement that allowed Peoples Gas to retain Dominion Resources, Inc.'s (Dominion) shared services until June 2011. During that time period, Peoples Gas needed to build a data and call center, hire Information Technology (IT) personnel, procure and install all hardware and software packages, and convert data onto its newly configured network system. Furthermore, Peoples Gas had to host the Peoples TWP and the Equitable Division systems on their network until a full conversion was completed on a single platform in July 2015.

The IT function is controlled and managed by Peoples Gas, but there are also select IT personnel dedicated to the Equitable Division and Peoples TWP. As shown in Exhibit XII-1, the Peoples Gas IT function is under the direction of the Chief Information Officer (CIO). Direct reports of the CIO include the Director(s) of IT Telecommunications & Facilities, IT Applications and IT Cyber Security & Infrastructure. Each department consists of infrastructure and application analysts, telecom engineers, and technicians. The duties of the aforementioned IT Telecom & Facilities, IT Applications, IT Cyber Security & Infrastructure and subgroups are summarized below:

- IT Telecom & Facilities planning, developing, and maintaining all aspects of telecommunication infrastructure, transport network, data network, voice network, and contact center, Help Desk and all PC Support for the Peoples Companies
- IT Applications selecting, implementing and directing all aspects of IT applications and ensuring that all strategic and tactical plans for applications and support are achieved
- IT Infrastructure and Cyber Security selecting, implementing and directing all aspects of IT infrastructure & cyber security and ensuring that all strategic and tactical plans for infrastructure, and support are achieved

Exhibit XII – 1
Peoples Natural Gas Company
Information Technology Organizational Chart
As of April 1, 2016

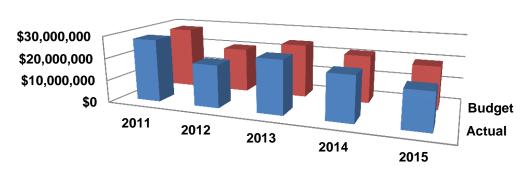


Source: Data Request No. EM-2

The IT Capital and Operations & Maintenance (O&M) expenditures are displayed in Exhibit XII-2. Capital spending ranged from \$28.1 million in 2011 to \$16.4 million in 2015. Capital expenditures were initially higher during this time period as a result of initiatives/major projects related to a data center redesign, acquisition and installation of hardware upgrades (e.g., servers, workstations, etc.), implementation of voice networks, and data connectivity throughout each of its service territories. O&M expenditures gradually increased from \$8.6 million to \$22.3 million with the acquisition and/or merger of Peoples TWP and the Equitable Division in 2011 and 2013, respectively. The acquisitions and mergers necessitated an increase in spend and resources to handle importing and converting data onto Peoples Gas' network. Additionally, Peoples Gas added an IT department to focus on Cyber Security in November of 2014.

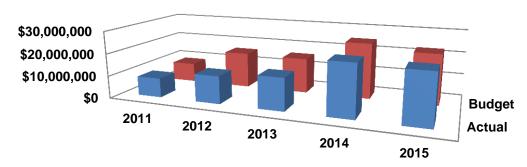
Exhibit XII – 2
Peoples Natural Gas Company LLC
Capital and Operations & Maintenance Expenses
For the Years 2011 through 2015

Capital



	2011	2012	2013	2014	2015
■ Actual	\$28,108,960	\$19,094,513	\$23,845,497	\$20,040,049	\$16,418,447
■Budget	\$28,132,653	\$20,231,923	\$24,221,667	\$21,375,000	\$19,120,400

Operations and Maintenance



	2011	2012	2013	2014	2015
■ Actual	\$8,614,920	\$12,337,471	\$14,420,419	\$23,056,518	\$22,305,392
Budget	\$8,693,682	\$16,023,745	\$15,715,182	\$24,834,959	\$22,470,804

Source: Data Request No. IT-5

To optimize business system functionalities, existing systems need to be constantly updated and/or upgraded by implementing the newest technologies on the market. Peoples Companies, in their efforts to enhance and ensure they meet their goal(s), have many projects underway, and conduct annual IT/cyber security audits and employee training sessions. Due to their sensitive nature, projects and audit results were provided to and reviewed by the Audit Staff, but are not disclosed in this audit report.

Findings and Conclusions

Our examination of the Peoples Companies' Information Technology included a review of the organizational structure, staffing levels, operational expenses, policies and procedures, cyber security measures, employee IT training techniques and all related information. Based on our review of Peoples Companies' information technology efforts, no particular evidence came to our attention that would lead the Audit Staff to conclude that areas reviewed were not being addressed adequately.

Recommendation - None.

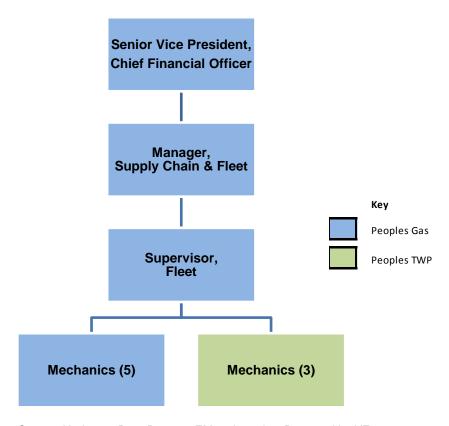
XIII. FLEET MANAGEMENT

Background

As discussed in Chapter II – Background, Peoples Service Company LLC (PSC) provides services for Peoples Natural Gas Company LLC (Peoples Gas), Peoples Natural Gas Company LLC – Equitable Division (Equitable Division), and Peoples TWP LLC (Peoples TWP), collectively called the Peoples Companies, which is indirectly controlled by SteelRiver Infrastructure Partners LP (referred to as SteelRiver, see Chapter II - Background). In the case of the Fleet Management function, Peoples Gas and Peoples TWP perform Fleet Management-related work on behalf of PSC with employees from the respective natural gas distribution companies (NGDC).

Exhibit XIII-1 displays the Fleet Management organizational structure at the Peoples Companies. The Supervisor, Fleet reports to the Manager, Supply Chain & Fleet who ultimately reports to the Senior Vice President, Chief Financial Officer. Peoples Gas has five mechanics while Peoples TWP has three mechanics.

Exhibit XIII – 1
Peoples Companies
Fleet Management Organization Chart
As of April 2016



Source: Update to Data Request EM01, Interview Request No. VE-01

All vehicles for the Peoples Companies are currently purchased and SAP serves as the fleet management information system which is used to store the vehicle/equipment inventory, track preventive maintenance, and develop performance reports (e.g., maintenance cost, utilization, etc.). Vehicle and equipment inventory by vehicle type is shown in Exhibit XIII-2. The replacement criteria for all vehicle classes are 10 years past model year or 115,000 miles accrued. Fleet Management is responsible for developing vehicle and equipment specifications and for developing an approved list of manufacturers and distributors. Supply Chain Management has the responsibility to ensure compliance with the bidding process. Fleet Management will review bids to make recommendations to Supply Chain Management based on technical acceptability and the ability of the vendor to deliver the product as required by the user. Supply Chain Management establishes vendor contracts that are used to create purchase order releases by Fleet Management. Fleet Management is also responsible for disposing of all fleet units. If a unit cannot be reassigned, it is auctioned off at a local auto auction.

Exhibit XIII – 2
Peoples Companies
Number of Vehicles by Vehicle Type
As of December 31, 2015

Vehicle Type	Quantity
Passenger Car & SUV	169
Van, Light & Heavy Truck	768
Equipment & Trailers	507
Total Vehicles and Equipment	1,444

Source: Data Request No. VE-15 and Auditor Analysis

Operators of all company-owned units are expected to adhere to the appropriate preventive maintenance schedule. Such units are checked monthly, together by both the operating employee and the supervisor of the department. This monthly "walk-around" utilizes a checklist designed by Fleet Management, with completed sheets kept on site and subject to random audit. Preventive maintenance standards require all company-owned vehicles to have the oil changed every 5,000 miles or every six months, whichever occurs first. Internal fleet maintenance/service is available at the Pitt Street service center in Wilkinsburg, but where not logistically possible, operators are to use approved vendors. Fleet vendors are authorized to make repairs up to \$500 without authorization from Fleet Management.

Findings and Conclusions

Our examination of the Fleet Management function included a review of operating and safety policies and procedures, staffing, vehicle and equipment acquisition and disposal practices, vehicle maintenance/repair, and benchmarking. Based on our review, the Peoples Companies should devote additional efforts to

improving the efficiency and/or effectiveness of its fleet management practices by addressing the following:

1. The Peoples Companies have not periodically performed a lease versus buy analysis in regards to the acquisition of vehicles and equipment.

A lease versus buy analysis for the acquisition of vehicles and equipment should be periodically performed. Some companies schedule the lease vs. buy analysis each year, while others perform the analysis whenever any procurement contract is up for renewal. The choice between owning and leasing of company vehicles and equipment will have an impact on a company's cash flow, income statement and balance sheet. Leasing provides a number of basic advantages including the preservation of capital, off balance sheet treatment of the lease transaction, less administration of the paperwork and recordkeeping requirements, and lessor acquisition and disposal of the vehicles. Ownership advantages include depreciation of the vehicles (which can be used to offset profits), pricing leverage from using local dealerships for all acquisitions, the ability to sell vehicles individually (lowering net depreciation), and a lower net present value cost by eliminating the lessor's profit factor. Although the analysis is usually performed by finance or treasury, the fleet manager will need to provide certain assumptions and data such as vehicle acquisition costs, replacement criteria and projections, and lease rate factors. Purchasing all vehicle and equipment needs may not be the least cost alternative for the Peoples Companies.

Peoples Gas has had a policy to purchase all vehicles and equipment dating back to January 28, 2000. In February 2010, PNG Companies LLC, a subsidiary of SteelRiver Infrastructure Fund North America LP, acquired Peoples Gas. Since the SteelRiver acquisitions of each of Peoples Companies, the focus has been on integrating the multiple natural gas distribution companies that have been acquired as well as the different fleet policies and vehicle/equipment types. The Peoples Companies stated that they traditionally keep vehicles beyond the typical lease life, which generally makes purchasing a better decision. Conducting a period lease versus buy analysis will help ensure that the Peoples Companies have selected the least cost alternative.

2. A cost benefit analysis to determine the feasibility of reestablishing an in-house capability for basic vehicle maintenance services at select larger shops was deferred until after the union labor agreements were finalized and a field office consolidation assessment had been completed.

The Internal Audit of Peoples Fleet Maintenance and Fuel Cards, dated October 31, 2014, suggested that maintenance costs could potentially be reduced by shifting basic maintenance services at larger shop locations from external vendors to expanded internal service resources, and that a cost benefit analysis was merited. The analysis was expected to be completed by April 30, 2015, but was deferred pending other priorities and the 2015 labor negotiations, field shop consolidations (refer to Chapter III Executive Management and Organizational Structure) and related discussions. The Peoples Companies planned to evaluate the feasibility of establishing a roving

mechanic capability after the union labor agreements were finalized and the field office consolidation assessment was complete. During the last week of April 2016, a single union agreement was ratified, replacing the three former union agreements. The former agreements did not permit working across union boundaries, so in some cases, shop closures would have been inefficient without changes to the contracts. Management indicated that it had begun preliminary shop closure analysis prior to ratification; a more precise plan can now be completed since the union agreement has been ratified.

The cost benefit analysis in regards to basic maintenance services, originally scheduled for completion by April 30, 2015, should be performed after the field office consolidation assessment has been completed. Performing additional basic maintenance services with Company personnel may be more cost effective than using external service providers.

Recommendations

- 1. Perform a periodic lease versus buy analysis and utilize the least cost alternative for acquiring vehicles and equipment.
- 2. Complete the cost benefit analysis for vehicle maintenance services and, if cost justified, perform additional basic maintenance services with Company personnel.

XIV. ACKNOWLEDGEMENTS

We wish to express our appreciation for the cooperation and assistance given to us during the course of this Focused Management and Operations Audit by the officers and staff of Peoples Natural Gas Company LLC, Peoples Natural Gas Company LLC – Equitable Division, and Peoples TWP LLC.

This audit was conducted by Tim Kerestes, Bryan Borres, Krystle Daugherty, Eric McKeever and Craig Bilecki of the Management Audit Staff of the Bureau of Audits.

XV. APPENDICES

Appendix A Peoples Natural Gas Company LLC

Financial and Operating Data and Statistics

Appendix B Peoples Natural Gas Company LLC

Balance Sheet

Appendix C Peoples Natural Gas Company LLC – Equitable Division

Financial and Operating Data and Statistics

Appendix D Peoples Natural Gas Company LLC – Equitable Division

Balance Sheet

Appendix E Peoples TWP LLC

Financial and Operating Data and Statistics

Appendix F Peoples TWP LLC

Balance Sheet

Appendix G Comparative Data and Statistics for the Pennsylvania Panel

Peoples Natural Gas Company LLC Financial and Operating Data and Statistics

Appendix A Page 1 of 2

Operating Statistics	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	Compound <u>Growth</u>
Gross Utility Plant	\$1,149,348,458	\$1,227,939,905	\$1,336,100,034	\$1,254,262,072	\$1,188,152,712	0.8%
Depreciation & Amortization	367,842,479	391,018,753	413,977,792	407,348,660	434,355,075	4.2%
Net Utility Plant	\$781,505,979	\$836,921,152	\$922,122,242	\$846,913,412	\$753,797,637	-0.9%
Operating Revenue:						
Residential	\$253,383,845	\$257,323,991	\$248,380,037	\$296,724,956	\$321,737,137	6.2%
Commercial	72,701,768	70,313,002	69,737,698	72,625,793	84,677,624	3.9%
Industrial	12,411,124	13,899,371	15,265,186	16,059,299	17,511,667	9.0%
Other	21,557,845	39,879,421	29,530,169	33,263,839	48,286,493	22.3%
Totals	\$360,054,582	\$381,415,785	\$362,913,090	\$418,673,887	\$472,212,921	7.0%
Deliveries by Volume (Mcf)						
Residential	31,255,844	29,776,771	27,155,309	31,972,117	34,275,171	2.3%
Commercial	16,642,451	15,656,403	15,683,407	16,483,046	18,253,120	2.3%
Industrial	19,422,274	21,771,218	25,744,105	21,480,245	20,555,706	1.4%
Other	07.000.500	0	178,496	398,725	2,025,618	NM
Total Mcf Sales	67,320,569	67,204,392	68,761,317	70,334,133	75,109,615	2.8%
Injected into Storage	10,918,609	14,024,042	9,290,369	10,108,395	1,205,280	-42.4%
Company Use	1,059,733	1,128,695	1,118,701	1,065,074	638,009	-11.9%
Exchange Gas, Off System Sales, etc.	689,617	883,398	333,227	4,962,950	4,029,045	55.5%
Total Deliveries (Mcf)	79,988,528	83,240,527	79,503,614	86,470,552	80,981,949	0.3%
Total Receipts (Mcf)	86,737,126	87,091,109	83,330,603	87,469,145	81,995,007	-1.4%
Unaccounted for Gas (Mcf)	5,009,022	3,850,582	3,266,887	3,823,095	2,996,143	-12.1%
UfG as a % of Total Receipt:	5.8%	4.4%	3.9%	4.4%	3.7%	-10.8%
Customers (Average):						
Residential	328,373	330,058	328,646	329,471	330,303	0.1%
Commercial	28,118	28,100	28,780	28,714	28,591	0.4%
Industrial	203	196	193	197	196	-0.9%
Transportation						
Other	0	3	3	5	7	NM
Totals	356,694	358,357	357,622	358,387	359,097	0.2%
Employees (Average)	542	647	748	770	769	9.1%
Distribution Mains (M. Ft.)	34,599	34,617	34,606	34,747	34,818	0.2%
Transmission Mains (M. Ft.)		5,725	5,738	4,540	4,544	-5.8%
Total Main Pipeline (M. Ft.)	40,365	40,342	40,344	39,287	39,362	-0.6%
Total Main Pipeline (Miles)	7,645	7,641	7,641	7,441	7,455	-0.6%
Services	352,530	350,774	351,575	352,942	354,975	0.2%

NM = Not Meaningful Source: PUC Annual Reports

Peoples Natural Gas Company LLC Financial and Operating Data and Statistics

Appendix A Page 2 of 2

Gas Operation & Maintenance Expenses	<u>2010</u> \$	<u>2011</u> \$	<u>2012</u> \$	<u>2013</u> \$	<u>2014</u> \$	Compound Growth
Natural Gas Production Expenses	7,740,604	7,391,504	7,728,820	7,542,161	8,354,937	1.9%
Other Gas Supply Expenses Total	164,999,098 10,020,985	159,959,287 5,728,224	112,068,606 6,390,937	137,103,714 6,017,645	185,040,379 1,788,867	
Transmission Expenses:						
Operation Maintenance Totals	16,117,843 1,898,647 18,016,490	14,927,191 1,275,725 16,202,916	14,053,414 1,928,269 15,981,683	15,943,209 1,806,085 17,749,294	33,624,426 1,377,612 35,002,038	-7.7%
Distribution Expenses:						
Operation Maintenance Totals	16,342,644 19,210,613 35,553,257	16,556,705 19,679,049 36,235,754	16,354,211 19,951,906 36,306,117	16,629,020 24,154,062 40,783,082	17,835,617 24,024,339 41,859,956	5.7%
Customer Accounts Expenses	18,071,258	21,282,041	15,889,400	21,975,238	25,327,812	8.8%
Customer Service & Inform. Expenses	1,761,731	2,605,683	3,994,597	2,151,904	1,841,175	1.1%
Sales Expenses	504,595	485,099	891,410	784,306	1,072,216	20.7%
Administrative & General Expenses:						
Operation Maintenance Totals	32,739,860 164,697 32,904,557	50,863,713 72,473 50,936,186	40,705,722 154,797 40,860,519	37,165,034 183,545 37,348,579	48,143,352 175,071 48,318,423	1.5%
Total Gas Operation & Maintenance Exp.	289,572,575	300,826,694	240,112,089	271,455,923	348,605,803	4.7%

NM - Not Meaningful Source: PUC Annual Reports

Peoples Natural Gas Company LLC - Equitable Division Financial and Operating Data and Statistics

Appendix B Page 1 of 2

Operating Statistics	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	Compound <u>Growth</u>
Gross Utility Plant	\$953,546,945	\$955,427,021	\$961,583,730	\$978,436,896	\$981,734,223	0.7%
Depreciation & Amortization			339,247,747	316,029,418	334,293,008	-0.4%
Net Utility Plant	\$613,834,368	\$617,633,040	\$622,335,983	\$662,407,478	\$647,441,215	1.3%
Operating Revenue:						
Residential		\$250,590,623	\$203,133,521	\$243,695,562	\$265,178,639	-1.5%
Commercial	73,653,395		55,507,303	65,449,787	71,243,241	-0.8%
Industrial	9,537,661	10,623,879		8,014,688	7,429,515	-6.1%
Other	2,410,376			2,346,197	19,424,559	68.5%
Totals	\$366,985,841	\$333,869,486	\$271,295,014	\$319,506,234	\$363,275,954	-0.3%
Deliveries by Volume (Mcf)						
Residential	21,987,206	21,185,010		22,198,102	24,247,341	2.5%
Commercial	14,357,191	12,794,486		13,440,925	14,503,563	0.3%
Industrial	12,438,876	14,262,467		12,911,189	13,334,955	1.8%
Other	48,783,273	48,241,963		48,550,216	16,495,862	NM 9.09/
Total Mcf Sales	46,763,273	46,241,963	44,536,354	46,550,216	68,581,721	8.9%
Injected into Storage	8,995,383	10,120,772	7,879,166	10,274,448	0	-100.0%
Company Use	360,869	371,319	393,912	361,522	372,493	0.8%
Exchange Gas, Off System Sales, etc.	0	0	0	0	2,780,060	NM
Total Deliveries (Mcf)	58,139,525	58,734,054	52,809,432	59,186,186	71,734,274	5.4%
Total Receipts (Mcf)	60,568,085	60,150,788		60,717,910	57,759,386	-1.2%
Unaccounted for Gas (Mcf)	2,428,560	1,416,734		1,531,724	2,520,701	0.9%
UfG as a % of Total Receipt		2.4%		2.5%	4.4%	2.1%
Customers (Average):						
Residential	240,298	242,288	241,388	242,195	243,147	0.3%
Commercial	17,342	17,576	17,466	17,629	17,724	0.5%
Industrial	134	136	138	138	138	0.7%
Transportation						
Other	0	0		0	11	NM
Totals	257,774	260,000	258,992	259,962	261,020	0.3%
Employees (Average)	374	357	346	324	275	-7.4%
Distribution Mains (M. Ft.)	18,124	20,103	20,151	18,527	18,514	0.5%
Transmission Mains (M. Ft.)	201	203	208	663	663	34.8%
Total Main Pipeline (M. Ft.)	18,325	20,306	20,359	19,190	19,177	1.1%
Total Main Pipeline (Miles)	3,471	3,846	3,856	3,634	3,632	1.1%
Services	249,079	249,079	249,079	257,824	258,061	0.9%

NM = Not Meaningful

Peoples Natural Gas Company LLC - Equitable Division Financial and Operating Data and Statistics

Appendix B Page 2 of 2

Gas Operation & Maintenance Expenses	<u>2010</u> \$	<u>2011</u> \$	<u>2012</u> \$	<u>2013</u> \$	<u>2014</u> \$	Compound Growth
Natural Gas Production Expenses	0	0	0	192,337	1,748,908	NM
Other Gas Supply Expenses Total	205,802,308 0	171,881,875 0	126,049,324 0	152,174,452 39	133,642,256 749	
Transmission Expenses:						
Operation Maintenance Totals	0 0	0 0	0 63,844 63,844	1,678,080 37,911 1,715,991	44,911,300 528,291 45,439,591	NM NM NM
Distribution Expenses:						
Operation Maintenance Totals	14,501,016 9,946,442 24,447,458	13,895,463 10,322,413 24,217,876	13,576,603 9,829,163 23,405,766	14,527,054 10,098,592 24,625,646	12,546,049 13,284,560 25,830,609	7.5%
Customer Accounts Expenses	13,801,933	9,706,403	8,845,295	12,704,551	11,826,989	-3.8%
Customer Service & Inform. Expenses	369,885	507,035	441,667	441,717	558,302	10.8%
Sales Expenses	594,527	588,144	527,526	584,427	47,903	-46.7%
Administrative & General Expenses:						
Operation Maintenance Totals	28,093,882 823,347 28,917,229	27,561,475 831,650 28,393,125	30,206,822 842,411 31,049,233	45,514,609 759,437 46,274,046	17,847,531 163,868 18,011,399	
Total Gas Operation & Maintenance Exp.	273,933,340	235,294,458	190,382,655	238,713,206	237,106,706	-3.5%

NM - Not Meaningful Source: PUC Annual Reports

Peoples TWP LLC **Financial and Operating Data and Statistics**

Appendix C Page 1 of 2

Operating Statistics	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	Compound Growth
Gross Utility Plant	\$238,257,616	\$249,470,030	\$261,440,429	\$284,802,211	\$306,616,760	6.5%
Depreciation & Amortization	81,949,764	86,456,976	87,841,992	90,385,925	95,419,378	3.9%
Net Utility Plant	\$156,307,852	\$163,013,054	\$173,598,437	\$194,416,286	\$211,197,382	7.8%
Operating Revenue:						
Residential	\$62,971,976	\$67,859,811	\$53,068,093	\$58,718,472	\$76,312,040	4.9%
Commercial	25,905,126	25,992,017	20,039,012	22,117,848	25,072,770	-0.8%
Industrial	12,157,199		7,166,357	6,811,773	6,991,776	-12.9%
Other	-865,193	2,496,548	558,239	1,547,435	2,244,563	0.50/
Totals	\$100,169,108	\$104,788,569	\$80,273,462	\$89,195,528	\$110,621,149	2.5%
Deliveries by Volume (Mcf)						
Residential	5,040,854	5,009,121	4,294,664	5,079,140	5,581,376	2.6%
Commercial	2,924,387		2,454,592	2,797,606	3,087,149	1.4%
Industrial	16,072,068	15,516,697	14,557,679	14,741,528	15,649,136	-0.7%
Other	04.007.000	0 000 000	28,483	33,904	20,255	0.00/
Total Mcf Sales	24,037,309	23,362,286	21,335,418	22,652,178	24,337,916	0.3%
Injected into Storage	1,792,086	2,165,362	1,895,240	937,629	0	-100.0%
Company Use	188,246	178,380	149,196	100,273	0	-100.0%
Exchange Gas, Off System Sales, etc.	0	0	383,618	517,656	0	NM
Total Deliveries (Mcf)	26,017,641	25,706,028	23,763,472	24,207,736	24,337,916	-1.7%
Total Receipts (Mcf)	27,087,044	25,919,795	24,587,368	25,097,474	32,667,695	4.8%
Unaccounted for Gas (Mcf)	1,069,403	213,767	823,896	889,738	732,326	-9.0%
UfG as a % of Total Receipt	3.9%	0.8%	3.4%	3.5%	2.2%	-13.2%
Customers (Average):						
Residential	55,954	56,033	55,989	56,154	56,390	0.2%
Commercial	4,403	4,338	4,258	4,325	4,352	-0.3%
Industrial	41	17	17	17	25	-11.6%
Transportation Other	0	0	5	4	4	NM
Totals	60,398	0 60,388	60,264	60,496	60,771	0.2%
				•		
Employees (Average)	202	203	201	199	191	-1.4%
Distribution Mains (M. Ft.)	8,193	8,163	8,186	8,253	8,257	0.2%
Transmission Mains (M. Ft.)		6,098	6,087	5,944	5,942	-0.8%
Total Main Pipeline (M. Ft.)	14,337	14,261	14,273	14,197	14,199	-0.2%
Total Main Pipeline (Miles)	2,715	2,701	2,703	2,689	2,689	-0.2%
Services	58,087	58,118	61,193	58,384	58,666	0.2%

NM = Not Meaningful Source: PUC Annual Reports

Peoples TWP LLC Financial and Operating Data and Statistics

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Gas Operation & Maintenance Expenses	<u>2010</u> \$	<u>2011</u> \$	<u>2012</u> \$	<u>2013</u> \$	<u>2014</u> \$	Compound Growth
Natural Gas Production Expenses	0	0	0	0	0	NM
Other Gas Supply Expenses Total	55,125,753 942,017	54,318,614 1,037,559	33,730,871 858,829	29,675,984 929,285	39,211,200 826,609	
Transmission Expenses:						
Operation Maintenance Totals	1,543,359 2,847,054 4,390,413	1,765,186 2,851,994 4,617,180	1,901,631 1,137,638 3,039,269	8,332,993 1,953,869 10,286,862	3,733,328 1,715,612 5,448,940	-11.9%
Distribution Expenses:						
Operation Maintenance Totals	2,556,653 1,109,667 3,666,320	2,745,181 1,353,037 4,098,218	4,204,625 1,191,964 5,396,589	5,361,677 1,931,048 7,292,725	5,338,149 2,096,501 7,434,650	17.2%
Customer Accounts Expenses	3,711,913	3,068,043	3,059,961	3,874,783	6,037,326	12.9%
Customer Service & Inform. Expenses	1,006,138	2,190,102	836,801	1,035,794	755,488	-6.9%
Sales Expenses	102,548	163,680	137,563	7,614	9,374	-45.0%
Administrative & General Expenses:						
Operation Maintenance Totals	12,345,597 2,136,932 14,482,529	11,713,729 2,498,696 14,212,425	9,551,782 2,456,937 12,008,719	11,027,351 161,227 11,188,578	9,311,241 153,417 9,464,658	
Total Gas Operation & Maintenance Exp.	83,427,631	83,705,821	59,068,602	64,291,625	69,188,245	-4.6%

NA - Not Meaningful Source: PUC Annual Reports

The Peoples Companies Comparative Data and Statistics for the Pennsylvania Panel

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Panel

ELEMENT	PNG	EGC	TWP	CGP	NFG	UGIC	<u>UGIP</u>	<u>UGIU</u>	Average
Number of Customers - 2014	359,097	261,020	60,771	420,450	213,507	79,901	165,382	365,007	248,849
Number of Customers - 2010	356,694	257,774	60,398	413,804	212,134	75,735	159,006	337,217	239,579
Compound Annual Growth Rate	0.2%	0.3%	0.2%	0.4%	0.2%	1.3%	1.0%	2.0%	1.0%
% Residential Customers - 2014	92.0%	93.2%	92.8%	91.1%	92.4%	86.5%	90.1%	89.8%	90.0%
Total Throughput (thousand Mcf) - 2014	81,995	57,759	32,668	120,050	58,112	30,015	75,786	142,233	85,239
Total Throughput (thousand Mcf) - 2010	86,737	60,568	27,087	117,681	50,456	32,454	65,335	124,401	78,065
Compound Annual Growth Rate	-1.4%	-1.2%	4.8%	0.5%	3.6%	-1.9%	3.8%	3.4%	1.9%
Mcf/Residential Customer - 2014	104	96	99	94	108	96	115	78	98
Transportation (thousand Mcf) - 2014	41,188	25,078	16,538	46,821	28,387	15,475	35,231	90,577	43,298
Transportation (thousand Mcf) - 2010	35,397	24,341	16,111	35,697	18,818	14,360	23,085	66,154	31,623
% Transportation - 2014	50.2%	43.4%	50.6%	39.0%	48.8%	51.6%	46.5%	63.7%	49.9%
% Transportation - 2010	40.8%	40.2%	59.5%	30.3%	37.3%	44.2%	35.3%	53.2%	40.1%
Compound Annual Growth Rate	5.3%	2.0%	-3.9%	6.5%	7.0%	3.9%	7.1%	4.6%	5.8%
Number of Employees @ 12/31/14	776	239	184	584	351	202	236	968	468
Miles of Distribution Main - 2014	6,594	3,506	1,564	7,363	4,897	3,684	2,515	5,525	4,797
Miles of Transmission Main - 2010	861	126	1,125	67	320	131	42	131	138
Services - 2014	354,975	258,061	58,666	420,733	213,635	84,430	130,564	328,716	235,616
Net Plant (\$Million) - 2014	754	647	211	1,261	345	289	617	1,020	706
Net Plant/Gross Plant - 2014	63.4%	65.9%	68.9%	78.4%	63.9%	68.7%	71.1%	67.2%	69.9%
Customers/Main Mile - 2014	48	72	23	57	41	21	65	65	50
Average Revenue/Residential Customer - 2014	\$974.07	\$1,090.61	\$1,353.29	\$1,023.01	\$925.37	\$1,251.31	\$1,199.57	\$753.09	\$1,030.47
Average Revenue/Residential Mcf - 2014	\$9.39	\$10.94	\$13.67	\$10.83	\$8.60	\$13.01	\$10.42	\$9.65	\$10.50

PNG = Peoples Natural Gas Company LLC

EGC = Equitable Gas Company

TWP = Peoples TWP, LLC

NFG = National Fuel Gas Distribution Corporation

CGP = Columbia Gas of Pennsylvania, Inc.

UGIC = UGI Central Penn Gas, Inc.

UGIP = UGI Penn Natural Gas, Inc.

UGIU = UGI Utilities, Inc.

Administrative & General Expense/Customer

<u>Company</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	Compound Growth
Columbia	\$129	\$135	\$114	\$127	\$140	2.1%
National Fuel	\$129	\$139	\$136	\$147	\$130	0.4%
UGI Central	\$240	\$203	\$152	\$200	\$191	-5.5%
UGI Penn	\$137	\$128	\$98	\$137	\$130	-1.3%
UGI Utilities	\$113	\$108	\$105	\$112	\$126	2.8%
Panel Average	\$149	\$143	\$121	\$144	\$144	-1.0%
Peoples	\$92	\$142	\$114	\$104	\$135	9.9%
Equitable	\$112	\$109	\$120	\$178	\$69	-11.4%
Peoples TWP	\$240	\$235	\$199	\$185	\$156	-10.2%

Operations & Maintenance Expense/Customer

<u>Company</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	Compound Growth
Columbia	\$1,149	\$1,006	\$734	\$908	\$948	-4.7%
National Fuel	\$941	\$890	\$778	\$828	\$851	-2.5%
UGI Central	\$1,512	\$1,431	\$1,048	\$1,143	\$1,207	-5.5%
UGI Penn	\$1,638	\$1,483	\$1,096	\$1,246	\$1,396	-3.9%
UGI Utilities	\$1,319	\$1,197	\$1,172	\$860	\$986	-7.0%
Panel Average	\$1,312	\$1,202	\$966	\$997	\$1,078	-4.8%
Peoples	\$812	\$839	\$671	\$757	\$971	4.6%
Equitable	\$1,063	\$905	\$735	\$918	\$908	-3.8%
Peoples TWP	\$1,381	\$1,386	\$980	\$1,063	\$1,139	-4.7%

Net Plant/Customer

Company	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	2014	ompound <u>Growth</u>
Columbia National Fuel UGI Central UGI Penn UGI Utilities	\$1,762	\$2,029	\$2,306	\$2,637	\$2,999	14.2%
	\$1,446	\$1,470	\$1,515	\$1,559	\$1,616	2.8%
	\$3,483	\$3,433	\$3,468	\$3,492	\$3,618	1.0%
	\$3,390	\$3,397	\$3,437	\$3,565	\$3,731	2.4%
	\$2,301	\$2,385	\$2,483	\$2,608	\$2,795	5.0%
Panel Average Peoples Equitable Peoples TWP	\$2,477	\$2,543	\$2,642	\$2,772	\$2,952	4.5%
	\$2,191	\$2,335	\$2,578	\$2,363	\$2,099	-1.1%
	\$2,381	\$2,376	\$2,403	\$2,548	\$2,480	1.0%
	\$2,588	\$2,699	\$2,881	\$3,214	\$3,475	7.6%

The Peoples Companies Appendix D Comparative Data and Statistics for the Pennsylvania Panel Page 3 of 8

Operations & Maintenance Expense/Operating Revenue

Company	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	Compound <u>Growth</u>
Columbia National Fuel UGI Central UGI Penn UGI Utilities	\$0.85	\$0.83	\$0.75	\$0.74	\$0.71	-4.5%
	\$0.41	\$0.41	\$0.42	\$0.41	\$0.40	-0.4%
	\$0.44	\$0.44	\$0.35	\$0.36	\$0.35	-5.6%
	\$0.46	\$0.45	\$0.42	\$0.42	\$0.43	-1.2%
	\$0.45	\$0.46	\$0.60	\$0.41	\$0.43	-1.5%
Panel Average	\$0.52	\$0.52	\$0.51	\$0.47	\$0.46	-2.9%
Peoples	\$0.46	\$0.46	\$0.39	\$0.38	\$0.44	-1.0%
Equitable	\$0.40	\$0.38	\$0.38	\$0.40	\$0.36	-2.8%
Peoples TWP	\$0.43	\$0.41	\$0.39	\$0.38	\$0.33	-6.4%

Net Plant/Operating Revenue

Company	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	Compound <u>Growth</u>
Columbia National Fuel UGI Central UGI Penn	\$1.30	\$1.67	\$2.36	\$2.15	\$2.24	14.5%
	\$0.63	\$0.67	\$0.81	\$0.77	\$0.77	5.0%
	\$1.02	\$1.05	\$1.17	\$1.09	\$1.06	0.8%
	\$0.94	\$1.03	\$1.31	\$1.21	\$1.16	5.3%
UGI Utilities Panel Average	\$0.79	\$0.92	\$1.27	\$1.23	\$1.21	11.2%
	\$0.94	\$1.07	\$1.38	\$1.29	\$1.29	8.2%
Peoples	\$1.23	\$1.29	\$1.50	\$1.19	\$0.95	-6.4%
Equitable	\$0.89	\$1.00	\$1.24	\$1.11	\$0.97	2.1%
Peoples TWP	\$0.80	\$0.80	\$1.13	\$1.15	\$1.01	5.8%

Operations & Maintenance Expense/Net Plant

Company	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	Compound <u>Growth</u>
Columbia National Fuel UGI Central UGI Penn UGI Utilities	\$0.65	\$0.50	\$0.32	\$0.34	\$0.32	-16.6%
	\$0.65	\$0.61	\$0.51	\$0.53	\$0.53	-5.1%
	\$0.43	\$0.42	\$0.30	\$0.33	\$0.33	-6.4%
	\$0.48	\$0.44	\$0.32	\$0.35	\$0.37	-6.2%
	\$0.57	\$0.50	\$0.47	\$0.33	\$0.35	-11.4%
Panel Average	\$0.56	\$0.49	\$0.38	\$0.38	\$0.38	-9.1%
Peoples	\$0.37	\$0.36	\$0.26	\$0.32	\$0.46	5.7%
Equitable	\$0.45	\$0.38	\$0.31	\$0.36	\$0.37	-4.8%
Peoples TWP	\$0.53	\$0.51	\$0.34	\$0.33	\$0.33	-11.5%

The Peoples Companies Appendix D Comparative Data and Statistics for the Pennsylvania Panel Page 4 of 8

Operations & Maintenance Expense/Mcf

Company	<u>2010</u>	<u>2011</u>	2012	2013	2014	ompound Growth
Columbia	\$13.27	\$12.56	\$11.16	\$5.05	\$4.86	-22.2%
National Fuel	\$4.99	\$4.40	\$3.96	\$3.79	\$3.61	-7.8%
UGI Central	\$5.01	\$4.81	\$3.80	\$3.76	\$3.76	-6.9%
UGI Penn	\$6.14	\$5.43	\$3.99	\$3.80	\$3.79	-11.3%
UGI Utilities	\$4.65	\$3.84	\$3.52	\$2.63	\$2.95	-10.8%
Panel Average	\$6.81	\$6.21	\$5.29	\$3.81	\$3.79	-13.6%
Peoples	\$4.30	\$4.48	\$3.49	\$3.86	\$4.64	1.9%
Equitable	\$5.62	\$4.88	\$4.27	\$4.91	\$3.46	-11.4%
Peoples TWP	\$3.47	\$3.58	\$2.77	\$2.84	\$2.84	-4.9%

Net Plant/Mcf

					С	ompound
<u>Company</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	Growth
Columbia National Fuel UGI Central UGI Penn UGI Utilities	\$20.36 \$7.67 \$11.54 \$12.71 \$8.11	\$25.32 \$7.27 \$11.53 \$12.45 \$7.65	\$35.07 \$7.72 \$12.57 \$12.51 \$7.45	\$14.67 \$7.14 \$11.49 \$10.88 \$7.97	\$15.39 \$6.85 \$11.25 \$10.14 \$8.36	-6.8% -2.8% -0.6% -5.5% 0.7%
Panel Average	\$10.23	\$10.74	\$11.84	\$11.42	\$9.38	-2.1%
Peoples Equitable Peoples TWP	\$11.61 \$12.58 \$6.50	\$12.45 \$12.80 \$6.98	\$13.41 \$13.97 \$8.14	\$12.04 \$13.64 \$8.58	\$10.04 \$9.44 \$8.68	-3.6% -6.9% 7.5%

Distribution Expense/Thousand Ft. Line

<u>Company</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	Compound <u>Growth</u>
Columbia National Fuel UCI Central UGI Penn UGI Utilities	\$1,022	\$1,043	\$1,051	\$1,186	\$1,417	8.5%
	\$546	\$535	\$511	\$507	\$531	-0.7%
	\$517	\$569	\$601	\$585	\$710	8.2%
	\$983	\$1,145	\$1,309	\$1,313	\$1,563	12.3%
	\$857	\$1,004	\$997	\$1,077	\$1,170	8.1%
Panel Average	\$785	\$859	\$894	\$934	\$1,078	8.3%
Peoples	\$1,028	\$1,047	\$1,049	\$1,174	\$1,202	4.0%
Equitable	\$1,349	\$1,205	\$1,162	\$1,329	\$1,395	0.8%
Peoples TWP	\$447	\$502	\$659	\$884	\$900	19.1%

Customer Accounts Expense/Customer

<u>Company</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	2 <u>2014</u>	ompound <u>Growth</u>
Columbia	\$82	\$76	\$54	\$63	\$77	-1.6%
National Fuel	\$50	\$36	\$43	\$39	\$50	0.0%
UGI Central	\$53	\$60	\$67	\$65	\$70	7.3%
UGI Penn	\$45	\$40	\$41	\$43	\$49	2.5%
UGI Utilities	\$48	\$50	\$49	\$44	\$48	-0.1%
Panel Average	\$55	\$52	\$51	\$51	\$59	1.5%
Peoples	\$51	\$59	\$44	\$61	\$71	8.6%
Equitable	\$54	\$37	\$34	\$49	\$45	-4.1%
Peoples TWP	\$61	\$51	\$51	\$64	\$99	12.8%

Unaccounted For Gas (as a % of Total Receipts)

					C	ompound
<u>Company</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	Growth
Columbia	0.06%	-1.52%	-0.15%	0.37%	1.19%	114.3%
National Fuel	-1.50%	-1.15%	0.70%	0.89%	0.17%	NM
UGI Central	0.80%	2.08%	3.32%	2.63%	1.70%	20.5%
UGI Penn	0.45%	0.41%	0.10%	-0.03%	0.44%	-0.5%
UGI Utilities	0.22%	0.25%	0.69%	0.35%	-0.02%	NM
Panel Average	0.01%	0.01%	0.93%	0.84%	0.70%	225.3%
Peoples	5.77%	4.42%	3.92%	4.37%	3.65%	-10.8%
Equitable	4.01%	2.36%	5.82%	2.52%	4.36%	2.1%
Peoples TWP	3.95%	0.82%	3.35%	3.55%	2.24%	-13.2%

Revenue/Employee

Company	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	Compound <u>Growth</u>
Columbia National Fuel UGI Central UGI Penn UGI Utilities	\$1,149,359 \$718,336 \$686,566 \$1,117,196 \$700,843	\$1,036,450 \$772,754 \$737,244 \$1,215,382 \$610,055	\$786,626 \$672,464 \$648,596 \$996,074 \$466,360	\$948,726 \$727,903 \$728,164 \$1,188,371 \$498,573	\$999,663 \$732,357 \$781,770 \$1,332,834 \$542,298	0.5% 3.3% 4.5%
Panel Average Peoples Equitable Peoples TWP	\$874,460 \$664,307 \$982,559 \$495,887	\$874,377 \$589,514 \$936,520 \$517,474	\$714,024 \$485,178 \$785,224 \$400,366	\$818,347 \$543,732 \$986,130 \$449,348	\$877,784 \$614,461 \$1,323,410 \$579,168	-1.9% 7.7%

NM = Not Meaningful

Customers/Employee

<u>Company</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	Compound Growth
Columbia	851	852	805	774	746	-3.2%
National Fuel	626	663	663	659	630	0.2%
UGI Central	333	380	391	403	406	5.1%
UGI Penn	541	633	660	703	714	7.2%
UGI Utilities	412	391	395	396	387	-1.6%
Panel Average	552	584	583	587	577	1.1%
Peoples	658	554	478	465	467	-8.2%
Equitable	690	729	750	802	951	8.3%
Peoples TWP	299	298	301	305	318	1.6%

Plant Materials and Operating Supplies/Net Plant

Company	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	Compound Growth
Columbia	0.08%	0.08%	0.07%	0.06%	0.05%	-10.3%
National Fuel	0.17%	0.17%	0.17%	0.19%	0.20%	3.3%
UGI Central	1.15%	1.14%	0.92%	0.99%	1.02%	-2.9%
UGI Penn	0.00%	0.00%	0.00%	0.00%	0.00%	NM
UGI Utilities	0.36%	0.42%	0.35%	0.44%	0.45%	5.4%
Panel Average	0.35%	0.36%	0.30%	0.33%	0.34%	-0.7%
Peoples	0.30%	0.28%	0.28%	0.31%	0.34%	2.5%
Equitable	0.09%	0.08%	0.08%	0.07%	0.05%	-15.1%
Peoples TWP	0.60%	0.63%	0.66%	0.48%	0.39%	-9.9%

Unprotected Bare Steel Main %

Company	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	Compound Growth
Columbia	25.3%	23.3%	22.3%	21.2%	20.2%	-5.5%
National Fuel	18.5%	17.9%	20.5%	20.1%	19.7%	1.5%
UGI Central	16.5%	16.2%	16.0%	14.0%	13.8%	-4.4%
UGI Penn	10.6%	10.3%	10.3%	4.2%	4.3%	-20.4%
UGI Utilities	4.9%	4.6%	4.8%	4.6%	4.2%	-3.7%
Panel Average	15.2%	14.5%	14.8%	12.8%	12.4%	-4.9%
Peoples	26.9%	26.5%	25.8%	25.5%	25.2%	-1.7%
Equitable	22.4%	21.0%	20.3%	20.1%	19.4%	-3.5%
Peoples TWP	36.5%	35.4%	35.0%	30.3%	29.4%	-5.3%

NA = Not Available

Source: PUC Annual Reports, DOT Annual Reports

Cast Iron Main %

<u>Company</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	Compound Growth
Columbia	0.8%	2.2%	2.0%	1.9%	1.7%	20.1%
National Fuel	1.7%	1.7%	3.6%	3.5%	3.5%	19.1%
UGI Central	0.5%	0.4%	0.4%	0.3%	0.2%	-15.9%
UGI Penn	4.7%	4.5%	4.3%	4.3%	4.2%	-2.6%
UGI Utilities	7.3%	6.8%	6.5%	5.8%	5.0%	-8.7%
Panel Average	3.0%	3.1%	3.4%	3.1%	2.9%	-0.5%
Peoples	0.9%	0.9%	0.3%	0.3%	0.3%	-27.6%
Equitable	1.3%	3.0%	2.9%	2.7%	2.6%	18.1%
Peoples TWP	0.0%	0.0%	0.0%	0.0%	0.0%	NM

Main Leaks Repaired/100 Main Miles

Company	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	Compound Growth
Columbia	56.6	52.2	51.7	44.4	45.2	-5.5%
National Fuel	35.8	28.4	27.2	26.9	31.6	-3.0%
UGI Central	13.8	20.9	19.2	16.4	17.9	6.8%
UGI Penn	41.0	36.4	24.4	30.4	32.2	-5.8%
UGI Utilities	27.3	34.0	32.7	35.7	42.2	11.5%
Panel Average	34.9	34.4	31.1	30.8	33.8	-0.8%
Peoples	46.0	42.0	43.7	39.5	38.4	-4.4%
Equitable	41.3	34.5	33.3	28.6	52.1	5.9%
Peoples TWP	46.9	66.9	41.7	20.6	21.9	-17.3%

Unprotected Bare Steel Service %

Company	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	Compound Growth
Columbia	16.1%	15.7%	14.9%	14.1%	13.5%	-4.3%
National Fuel	14.7%	14.5%	13.2%	12.6%	12.1%	-4.7%
UGI Central	0.5%	0.5%	0.5%	0.5%	0.5%	-0.6%
UGI Penn	1.0%	0.9%	0.7%	0.7%	0.7%	-6.5%
UGI Utilities	4.8%	4.5%	4.1%	3.8%	3.4%	-8.3%
Panel Average	7.4%	7.2%	6.7%	6.4%	6.0%	-5.0%
Peoples	15.0%	14.7%	14.3%	14.0%	3.2%	-31.8%
Equitable	6.6%	6.0%	5.7%	11.9%	0.4%	-50.2%
Peoples TWP	20.2%	19.6%	18.9%	17.9%	16.1%	-5.6%

NM = Not Meaningful

Source: PUC Annual Reports, DOT Annual Reports

The Peoples Companies Appendix D Comparative Data and Statistics for the Pennsylvania Panel Page 8 of 8

Service Leaks Discovered/1,000 Services

<u>Company</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	Compound Growth
Columbia	5.1	5.2	4.9	5.7	6.3	5.2%
National Fuel	4.6	4.5	4.3	4.3	5.0	2.4%
UGI Central	2.6	2.3	4.7	2.6	4.1	12.0%
UGI Penn	10.6	10.5	8.3	8.1	8.6	-5.2%
UGI Utilities	4.4	5.2	4.1	4.5	4.6	0.9%
Panel Average	5.5	5.5	5.3	5.0	5.7	1.1%
Peoples	16.8	13.2	14.0	12.5	10.8	-10.5%
Equitable	3.8	3.9	2.8	2.5	2.7	-8.2%
Peoples TWP	3.2	5.7	6.0	8.6	8.1	26.3%

NA = Not Available

Source: PUC Annual Reports, DOT Annual Reports

