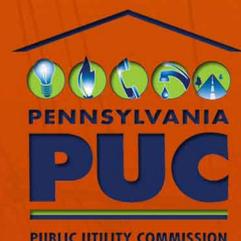


**FOCUSED MANAGEMENT
AND
OPERATIONS AUDIT
OF
PIKE COUNTY LIGHT &
POWER COMPANY
AND
LEATHERSTOCKING GAS
COMPANY LLC**

**Prepared By The
Pennsylvania Public Utility Commission
Bureau of Audits
Issued November 2017**

Docket Nos. D-2017-2584891 and D-2017-2584892



**PIKE COUNTY LIGHT & POWER COMPANY
LEATHERSTOCKING GAS COMPANY LLC
FOCUSED MANAGEMENT AND OPERATIONS AUDIT**

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**PIKE COUNTY LIGHT & POWER COMPANY
LEATHERSTOCKING GAS COMPANY LLC
FOCUSED MANAGEMENT AND OPERATIONS AUDIT**

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FOCUSED MANAGEMENT AND OPERATIONS AUDIT**

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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 concurrently of Pike County Light & Power Company (PCLP) and Leatherstocking Gas Company LLC (LGC) as each entity shares a common parent. Moreover, LGC recently exceeded \$10 million plant in service which promulgated a management audit review. 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, under 66 Pa.C.S. § 501(b). More specifically, the Commission can investigate and examine the condition and management of any public utility, under 66 Pa.C.S. § 331(a).

This report summarizes the work of the Commission's Management Audit team and outlines their conclusions. The findings presented in the report identify 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 the focused management and operations audit were:

- To provide the Commission, PCLP, LGC, and the public with an assessment of the efficiency and effectiveness of the 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 PCLP and LGC.

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

B. Audit Approach

The focused management and operations audit was performed by the Management Audit staff of the PUC's Bureau of Audits. The audit began with pre-fieldwork analysis as outlined:

- A multi-year internal trend and ratio analysis (see Appendices A, B, C, and D) was completed using limited financial and operational data obtained from the Commission, filings made at the Commission, and other available sources.
- Input was solicited from Commission Bureaus and Offices, and certain external parties regarding any concerns or issues they would like addressed during our review.
- Other Commission-conducted audits, and other available documents concerning PCLP and LGC were reviewed.

Information from the above steps was used to initially focus the PUC 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:

- Organizational Structure and Staffing
- Corporate Governance
- Financial Management
- Cost Allocations
- Electric Operations
- Gas Operations
- Emergency Preparedness
- Customer Service
- Settlement Agreement

The pre-fieldwork analysis should not be construed as a comprehensive evaluation of the management or operations in the functional areas not selected for in-depth examination. If 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-fieldwork review.

Fieldwork began on March 27, 2017 and continued intermittently through July 12, 2017. The principal components of the fact gathering process included:

- Interviews with personnel from PCLP, LGC, and affiliates, and other Commission Bureaus.
- Analysis of records, documents, and reports of a financial and operational nature. The analysis focused primarily on the period 2013 - 2016, as well as 2017 as available.
- Visits to the operations centers, gas facilities, electric facilities and observation of selected work practices, etc.

C. Functional Area Ratings

For the functions or areas that were selected for in-depth examination, the PUC’s audit staff rated the actual operating or performance level relative to the expected performance level at the time of the audit. The expected performance level is the state at which each area or function should be operating given the 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 can be found in Exhibit I-1.

**Exhibit I-1
Pike County Light & Power Company
Leatherstocking Gas Company LLC
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
Organizational Structure and Staffing				X	
Corporate Governance			X		
Financial Management			X		
Cost Allocations				X	
Electric Operations		X			
Gas Operations			X		
Emergency Preparedness				X	
Customer Service			X		
Settlement Agreement		X			

D. Benefits

Where possible, the PUC's audit staff attempts to quantify the potential savings that would be expected from effectively implementing the recommendations made in this report. However, for most 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 they did not previously exist or were not fully functional. Similarly, changes in work flow or implementation of good business practices will improve the effectiveness and efficiency of a specific function but cannot be easily quantified.

Companies will have options in implementing the recommendations and thus the PUC's audit staff have 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 XI provide the findings, conclusions, and recommendations for each function or area reviewed during this focused audit. Exhibit I-2 summarizes the recommendations with the following priority assessments for implementation:

- **INITIATION TIME FRAME** – Estimated time frame on how quickly the companies should be able to initiate its implementation efforts given the 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.
- **BENEFITS** – Net quantifiable benefits have been provided where they could be estimated as discussed in Section D - Benefits. Our estimated overall level of benefits rankings is not solely based on quantifiable dollars but rather the PUC Audit Staff's assessment of the potential overall impact of the recommendation on the efficiency and/or effectiveness of the 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.

- LOW BENEFITS – Implementation of the recommendation is likely to result in service improvements, management practices and performances, and/or enhance cost controls.

**Pike County Light & Power Company
Leatherstocking Gas Company LLC
Focused Management and Operations Audit
Summary of Recommendations**

Rec. No.	Recommendation	Page No.	Initiation Time Frame	Benefits (including \$ estimates)
Chapter III – Organizational Structure and Staffing				
III-1	Expand the safety manual to include detailed safety topics related to gas and electric operations.	21	6-12 months	High
III-2	Document and update annually LGC and PCLP's short- and long-term strategic plans.	21	9-12 Months	Medium
III-3	Develop a staffing plan to document the cost-benefit analyses used to support the decision-making process in determining staffing level resources.	21	0-3 Months	High
III-4	Select, purchase, install, and test all remaining computer systems required to run and manage PCLP in a timely manner.	21	0-3 Months	High
III-5	Prepare and file annual diversity reports with the Commission.	21	0-6 Months	Low
Chapter IV – Corporate Governance				
IV-1	Periodically review and update documents applicable to corporate governance of PCLP and LGC.	30	0-6 Months	Low
IV-2	Develop a charter for the CNGHC Nominating and Compensation Committee regarding PCLP and LGC governance.	30	0-6 Months	Low
IV-3	Annually evaluate director performance and skillsets taking into consideration emerging needs and priorities, and provide director education and/or modify composition as necessary.	30	0-12 Months	Medium
IV-4	Develop corporate governance guidelines for PCLP and LGC.	30	0-6 Months	Medium
IV-5	Annually, set specific performance goals for the LGC President and conduct evaluations of established performance goals.	30	0-12 Months	Medium
Chapter V – Financial Management				
V-1	Document financial management policies and procedures for LGC and PCLP and ensure documents accurately and appropriately reflect practices in policy.	36	0-12 Months	Medium

**Pike County Light & Power Company
Leatherstocking Gas Company LLC
Focused Management and Operations Audit
Summary of Recommendations**

Rec. No.	Recommendation	Page No.	Initiation Time Frame	Benefits (including \$ estimates)
Chapter V – Financial Management (continued)				
V-2	Document an internal dividend policy for LGC and PCLP and provide advanced notice, and written explanation to the Commission for each dividend payment in excess of 85% of net income.	36	0-12 Months	Low
V-3	Develop and document guidelines and policies for budget creation and management including the regular reporting of budget variances for LGC and PCLP.	36	0-12 Months	Medium
Chapter VI – Cost Allocations				
VI-1	Enhance the cost allocation manual applicable to LGC and PCLP to reflect all cost allocation and affiliate transaction related processes.	42	0-12 Months	Medium
VI-2	Implement mandatory refresher training on time sheet entry for shared employees.	42	0-12 Months	Medium
VI-3	Ensure all charges between affiliates are appropriate, reasonable, documented, and align with the PA PUC-approved affiliated interest agreement.	43	0-6 Months	High
Chapter VII – Electric Operations				
VII-1	Develop and periodically update an Electric Operations and Maintenance Manual specific to PCLP's system.	46	0-9 Months	Medium
VII-2	Update PCLP's Storm Response and Restoration Plan and tailor it to PCLP's available equipment, resources, and capabilities.	46	0-12 Months	Low
Chapter VIII – Gas Operations				
VIII-1	Accelerate replacement of unprotected bare steel and cast iron main for PCLP.	58	Ongoing	High
VIII-2	Track dispatch times for gas odor/emergency calls for PCLP.	58	0-9 Months	Low
VIII-3	Develop and maintain all gas operation procedures in accordance with federal regulations for PCLP.	58	0-12 Months	Medium

**Pike County Light & Power Company
Leatherstocking Gas Company LLC
Focused Management and Operations Audit
Summary of Recommendations**

Rec. No.	Recommendation	Page No.	Initiation Time Frame	Benefits (including \$ estimates)
Chapter IX – Emergency Preparedness				
IX-1	Develop an Emergency Response Plan (ERP) for PCLP and update LGC’s ERP and review, test, and update it annually.	67	0-3 Months	High
IX-2	Develop Physical Security Plans for PCLP and LGC, and review, test, and update them annually.	67	0-3 Months	High
IX-3	Develop comprehensive Business Continuity Plans for LGC and PCLP and review, test, and update them annually.	68	0-6 Months	Medium
IX-4	Develop comprehensive Cybersecurity Plans for LGC and PCLP, and consider utilizing a cybersecurity risk analysis or cyber vulnerability assessment.	68	0-12 Months	High
IX-5	Increase IT resources at PCLP and LGC and review IT resource needs regularly.	68	0-3 Months	High
IX-6	Engage a trusted outside agency or security specialist to conduct a vulnerability assessment and penetration test on PCLP and LGC facilities periodically.	68	0-18 Months	Medium
IX-7	Correct minor deficiencies in physical security at PCLP and LGC facilities, implement a system of security inspections at all facilities, and improve security measures.	68	0-24 Months	High
IX-8	Review and modify LGC’s policy of not providing fire extinguishers at gate stations, and provide adequate first aid equipment, extinguishers, and safety data sheets at all work locations.	68	0-3 Months	Medium
Chapter X – Customer Service				
X-1	Automate the LGC meter reading process to eliminate manual and redundant data entry tasks to improve efficiencies.	75	0-12 Months	Low
X-2	Document policies and procedures to govern customer service practices.	75	0-12 Months	Medium

**Pike County Light & Power Company
Leatherstocking Gas Company LLC
Focused Management and Operations Audit
Summary of Recommendations**

Rec. No.	Recommendation	Page No.	Initiation Time Frame	Benefits (including \$ estimates)
Chapter X – Customer Service (continued)				
X-3	Reduce long-term customer arrearages by implementing various collection methods including increased customer contact, review of customer repayment plans and terms, etc.	75	0-6 Months	High
Chapter XI – Settlement Agreement				
XI-1	Continue efforts to ensure compliance with time sensitive stipulations of the Settlement Agreement.	79	0-3 Months	High

II. BACKGROUND

Pike County Light & Power Company

On August 11, 2016, the PUC approved Corning Natural Gas Holding Corporation's (CNGHC) acquisition of the stock of PCLP from Orange and Rockland Utilities, Inc. (O&R)¹. O&R and CNGHC closed on the sale of PCLP on August 31, 2016. Under O&R's ownership, PCLP had no employees. Therefore, the PUC's recommended decision also approved a Transition Services Agreement (TSA), which specifies the services that O&R will continue to perform on behalf of PCLP until PCLP can employ the necessary personnel or hire contractors for the services. As of July 12, 2017, PCLP employs a general manager, who oversees five employees: a customer affairs manager, a billing clerk, two customer service representatives, and an administrative assistant. See Chapter XI – Settlement Agreement for more information about the stipulations that PCLP agreed to meet as part of the acquisition.

As of December 31, 2016, PCLP had about 4,700 electric customers located in the townships of Westfall, Milford, and Dingman and the boroughs of Matamoras and Milford in Pike County. Additionally, PCLP provides natural gas to approximately 1,200 of its electric customers in the township of Westfall and borough of Matamoras. PCLP's headquarters and operation center are in Westfall, PA. Exhibit II-1 details a breakdown of PCLP's 2016 customer count, usage and revenues by customer class for the period of September 1 through December 31, 2016.

¹ Docket Nos.: A-2015-2517036, A-2015-2517111, G-2015-2517113, G-2015-2517114, S-2015-2517115, and S-2015-2517116

**Exhibit II-1
Pike County Light & Power Company
Customer Base Statistics
As of December 31, 2016**

Electric Customer Class	# of Customers	% of Customers	Volume of Usage (KWHs)	% of Sales	Revenues	% of Revenues
Residential	3,736	78.7%	9,426,194	37.2%	\$1,044,127	40.6%
Commercial	1,004	21.2%	15,843,770	62.5%	\$1,496,674	58.3%
Public	5	0.1%	82,397	0.3%	\$28,075	1.1%
Total	4,745	100.0%	25,352,361	100.0%	\$2,568,876	100.0%

Gas Customer Class	# of Customers	% of Customers	Volume of Usage (MCFs)	% of Sales	Revenues	% of Revenues
Residential	1,127	92.9%	36,509	77.5%	\$359,045	80.6%
Commercial	86	7.1%	10,577	22.5%	\$86,147	19.4%
Total	1,213	100.0%	47,086	100.0%	\$445,192	100.0%

Note: CNGHC's purchase of PCLP on August 31, 2016 led to PCLP's 2016 PUC Annual Report being filed only with data under its new ownership thus volume and revenue data is for the period September 1, 2016 through December 31, 2016.

Source: 2016 PUC Annual Report

Leatherstocking Gas Company

Leatherstocking Gas Company LLC (LGC) is a 50/50 joint venture between CNGHC and Mirabito Regulated Industries, LLC (MRI) formed in November 2010 with the purpose of providing natural gas distribution service to currently un-served or underserved regions of central New York State and the northern tier of Pennsylvania. On September 27, 2012, the Public Utility Commission approved LGC's application to provide service to the Townships of Bridgewater, Forest Lake, Great Bend, Harmony, New Milford and Oakland and the Boroughs of Great Bend, Hallstead, Lanesboro, Montrose, New Milford, Oakland and Susquehanna². In July 2013, the PUC issued a Certificate of Public Convenience to LGC to serve as a natural gas utility in Wyalusing Township and Wyalusing Borough within Pennsylvania's Bradford County³. LGC completed installation of service to their first residential natural gas customer in November 2013. LGC also has franchises in four counties within central New York⁴. For the purpose of this report, only the Pennsylvania portions of LGC are considered. LGC is authorized by the Pennsylvania Department of State to conduct business in Pennsylvania, and has an office and operations center within its Pennsylvania franchise in Montrose PA. LGC's headquarters is officially in Binghamton, NY, which is the headquarters of MRI. As of July 12, 2017, LGC employed two gas technicians with support services provided by employees of CNG and Mirabito Holdings Incorporated

² Docket No. A-2011-2275595

³ Docket No. A-2013-2356912

⁴ As of July 12, 2017, LGC had zero customers within its NY franchises.

PIKE COUNTY LIGHT & POWER COMPANY
LEATHERSTOCKING GAS COMPANY LLC

(MHI)⁵. A summary of LGC’s customer count, usage, and revenues by customer class as of December 31, 2016 are shown in Exhibit II-2. See Chapter VIII – Gas Operations for specific information about LGC’s current gas operations.

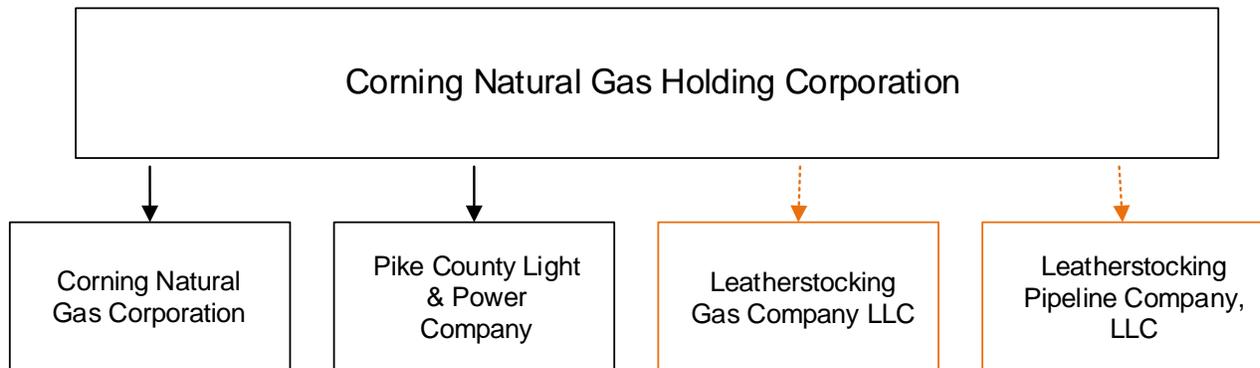
**Exhibit II-2
Leatherstocking Gas Company LLC
Customer Base Statistics
As of December 31, 2016**

Customer Class	# of Customers	% of Customers	CCF Sold	% of CCF Sold	Revenues	% of Revenues
Residential	273	76.9%	290,406	40.9%	\$266,131	27.5%
Commercial	81	22.8%	413,405	58.2%	\$574,441	59.4%
Industrial	1	0.3%	5,951	0.8%	\$126,112	13.0%
Totals	355	100.0%	709,762	100.0%	\$966,684	100.0%

Note: Errors due to rounding.
Source: 2016 PUC Annual Report

As shown in Exhibit II-3, CNGHC’s subsidiary structure includes Corning Natural Gas Corporation (CNG), Leatherstocking Pipeline Company, LLC (LPC), PCLP and LGC. CNG is a natural gas distribution company under the jurisdiction of the New York Public Service Commission. CNG’s executive management and staff provide varying degrees of support for PCLP and LGC as discussed later. Additional information about affiliate relations and cost allocations can be found in Chapter VI – Cost Allocations. LPC is an unregulated company that owns a gate station utilized by LGC.

**Exhibit II-3
Corning Natural Gas Holding Corporation
Corporate Entity Chart
As of July 2017**



Note: LGC and LPC are both 50% owned by CNGHC and MRI. Affiliate companies of CNGHC not part of the scope of this audit are not present in this exhibit.

Source: Company response to Data Request OS-3

⁵ MHI is an affiliated company of MRI.

III. ORGANIZATIONAL STRUCTURE AND STAFFING

Background

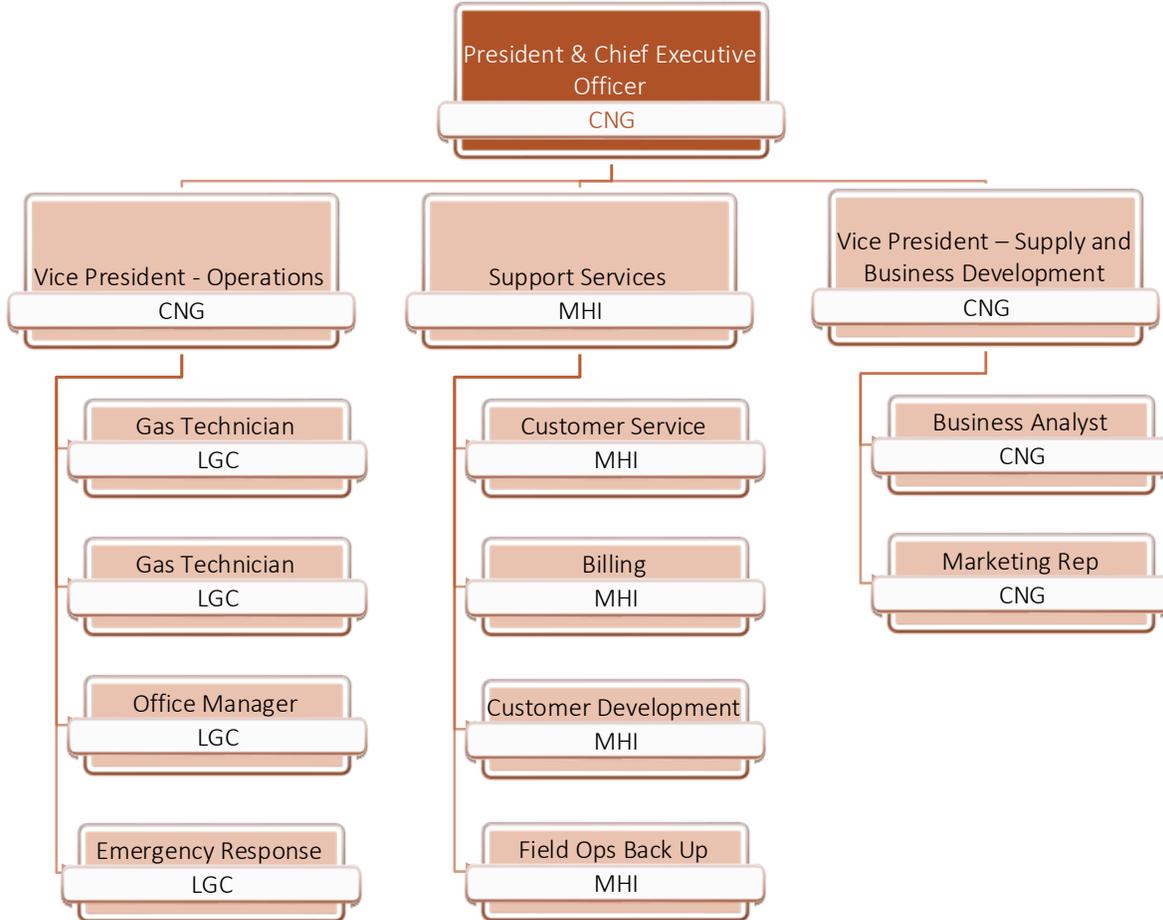
Leatherstocking Gas Company

As discussed in Chapter II – Background, LGC is owned 50% by Corning Natural Gas Holding Corporation (CNGHC) and 50% by Mirabito Regulated Industries, LLC (MRI). While LGC employs two gas technicians and an office manager, LGC’s support services are provided by employees of Corning Natural Gas Corporation (CNG) and Mirabito Holdings Incorporated (MHI)⁶ as shown in Exhibit III-1. Additional information about the sharing of resources and employees between LGC, PCLP and their affiliate companies can be found in Chapter VI – Cost Allocations.

As discussed further in Chapter IV – Corporate Governance, the LGC Board of Directors is composed of three executives from CNG, three executives from MRI, and one independent director. LGC’s Board of Directors provides its strategic direction, which is discussed in detail within this chapter’s Finding and Conclusion No. 2.

⁶ MHI is an affiliated company of MRI and oversees numerous subsidiaries outside the scope of our audit.

**Exhibit III-1
Leatherstocking Gas Company LLC
Organizational Chart
As of March 27, 2017**



Source: Company response to Data Request OS-1

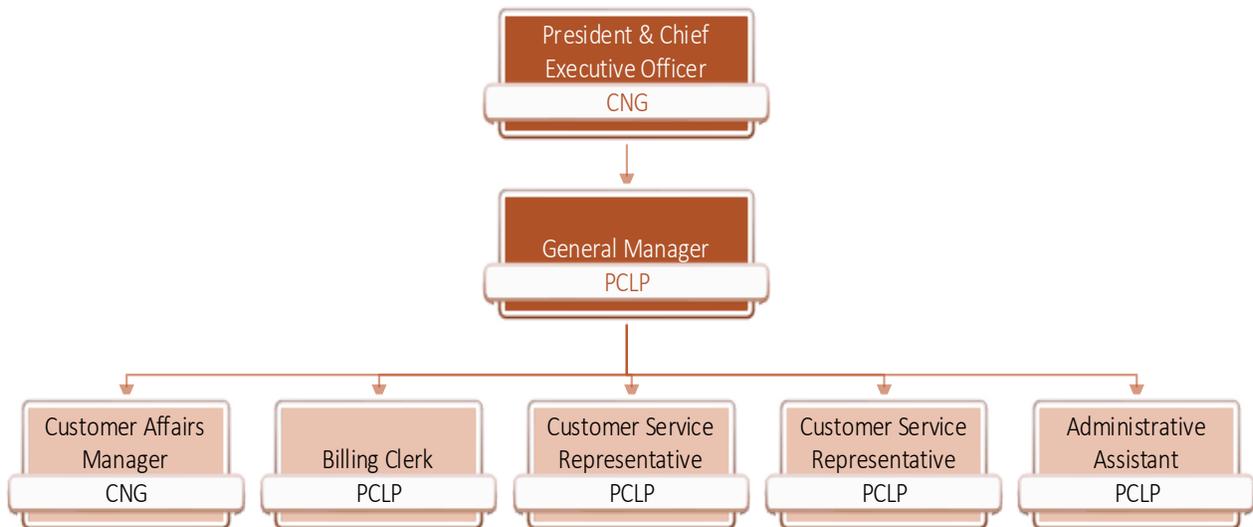
Pike County Light & Power Company

As discussed in Chapter II – Background, CNGHC acquired ownership of PCLP’s stock on August 31, 2016. At the time of sale, PCLP had no employees as it used employees and services from its owner O&R. As part of the stock transfer application to the Commission, and as specified in the Settlement Agreement which the Commission approved, PCLP and O&R have a Transition Services Agreement (TSA) effective until February 2018 for PCLP to receive services defined in the TSA from O&R until such time that it can hire employees or contractors to fulfill the required services. As shown in Exhibit III-2 PCLP employs a general manager (GM), who oversees five PCLP employees: a customer affairs manager⁷, a billing clerk, two customer service

⁷ The customer affairs manager is a CNG employee who also performs customer service and marketing duties on behalf on PCLP and LGC.

representatives, and an administrative assistant⁸. As of June 2017, PCLP was in the process of hiring two additional employees, a gas technician and a work planner, in addition to planning to hire contractors to provide: vegetation management, electric line construction, pole inspection/treatment and meter reading services. The use of contractors is permitted by the Settlement Agreement with approval from the Commission. PCLP's staffing plans are discussed in more detail in Finding and Conclusion No. 3 within this chapter.

**Exhibit III-2
Pike County Light & Power Company
Organizational Chart
As of June 29, 2017**



Source: Company response to Data Request OS-1, Interview OS-6 and Auditor Analysis

Additional LGC and PCLP Discussion

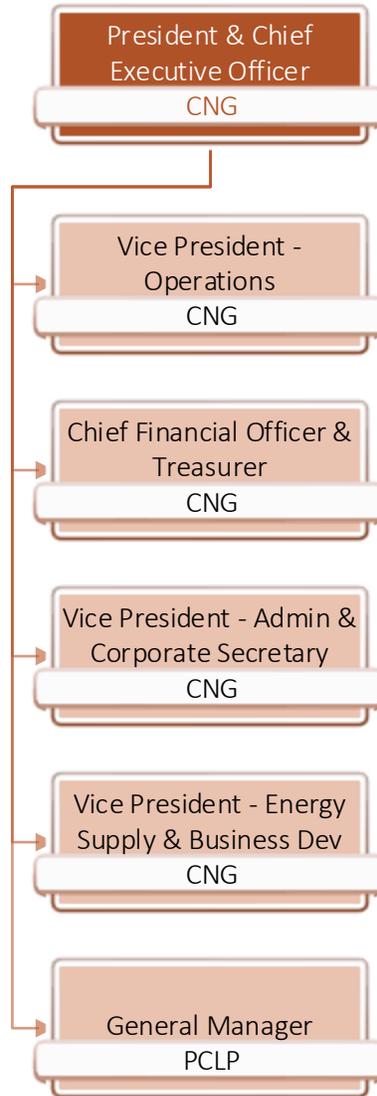
As discussed briefly and indicated within Exhibits III-1 and III-2, LGC and PCLP receive various levels of support services from CNG employees including: executive management, financial management, corporate governance, operations, customer service, information technology, etc. Additional information on shared employees can be found within their respective chapters such as Chapter VI – Cost Allocations, Chapter V – Financial Management, Chapter X – Customer Service, etc.

CNG's succession plan is reviewed annually by CNG's President & CEO and CNGHC's Board of Directors. More comprehensive reviews occur about every four years. CNG's succession plan examines the likelihood of utilizing internal or external candidates for PCLP's GM and executive management positions at CNG. CNG's

⁸ As of July 12, 2017 the two CSRs and administrative assistant were temporary employees hired through an employment agency with PCLP intending to hire them as full time employees following a 90-day probationary period.

executive level organizational chart is shown in Exhibit III-3. Additionally, short-term contingencies for unexpected vacancies were identified. There are no specific leadership trainings or employee development offered as part of succession planning at CNG.

**Exhibit III-3
Corning Natural Gas Corporation
Executive Level Organizational Chart
As of March 27, 2017**



Source: Company response to Data Request OS-2

Findings and Conclusions

Our examination of PCLP and LGC’s organizational structure and staffing included a review of their short- and long-term goals and objectives, the effectiveness of their present organizational structure to support these objectives, the ongoing strategic

and operational planning processes, succession planning and diversity. Based on our review of PCLP, LGC, and their supporting organizations, additional efforts should be devoted to improving efficiency and/or effectiveness by addressing the following:

1. Safety rules and policies for PCLP and/or LGC have not been updated since January 2014 and lack sufficient details pertaining to gas and electric operations.

It is essential that utilities enforce a consistent safety message for all employees to prevent accidents and injuries. CNG's supervisor of safety and training oversees every aspect of safety and training for field and office employees within CNG, LGC, and PCLP⁹. Safety and training oversight includes: new employee safety training/on-boarding, safety rules and policies, monthly safety meetings, safety inspections, Operator Qualification, reporting safety/accident data, and ensuring that training is offered based on safety data trends.

LGC and PCLP follow safety rules and policies created by CNGHC which were last updated in January 2014 prior to the hiring of employees for LGC and PCLP. The safety rules and policies covered in the document are broad, covering personal protective equipment, vehicle accidents, animal bites, and some specific areas of concern within gas operations. There are no specific policies related to electric operations. The CNG employee handbook also contains a limited overview of safety rules and procedures for reporting injuries and illnesses.

The supervisor of safety and training acknowledged that LGC and PCLP's safety rules and policies should be updated but stated that changes to operator qualification have delayed initiation of the revision process. To assist with updating safety rules and policies related to electric operations, the supervisor of safety and training is considering hiring a safety consultant to revise LGC and PCLP's safety rules and policies. Without documented safety policies and procedures, employees rely upon safety practices employed in the field or periodic training which fosters inconsistencies and could result in inconsistent practices, accidents and injuries.

2. Strategic planning documents for Leatherstocking Gas Company and Pike County Light & Power are inadequate.

LGC's Board of Directors holds strategic planning meetings annually as part of the budgeting process for the upcoming fiscal year. In March 2014, LGC's five-year strategic plan was developed, which included an overview of LGC's objectives and how LGC intends to accomplish the objectives. LGC's marketing plan was developed in May 2015 and outlines the personnel and processes utilized to interact with key community stakeholders within LGC's service territory to attract customers. Although LGC's marketing plan contains a sample report for tracking LGC's Key Productivity Indicators

⁹ Because PCLP has a small complement of employees and receives most of its services from O&R under the TSA a limited amount of the supervisor of safety and training's time has been focused on PCLP.

(KPIs), no such reports have been developed. Additionally, LGC's Board does not utilize tools such as SWOT (Strength, Weakness, Opportunity and Threat) analysis, balanced scorecards or other tools to conduct risk-based analyses.

Because CNGHC has owned PCLP for less than one year, no PCLP specific strategic planning documents have been created. Additionally, long-term strategic plans are not expected to be documented for PCLP within two to three years. However, as a stipulation of the Settlement Agreement, PCLP informs the PUC of planned endeavors via written quarterly updates related to hiring staff and/or contractors to perform work, status of the TSA, and progress of mandated studies. PCLP has also had modification or substitutions to its staffing plan permitted by the Settlement Agreement approved by the Commission. Additional information about PCLP's progress towards completing Settlement Agreement stipulations can be found at Chapter XI – Settlement Agreement. The guiding strategic vision for PCLP is primarily influenced by compliance with the Settlement Agreement and PCLP's goal to operate independently of the services provided via the TSA as quickly as possible.

Without up-to-date strategic plans that feature risk-based analyses, the decision-making process at LGC and PCLP may be slow and disorganized when faced with unexpected events. Best practices for strategic planning documents include:

- A planning process with clearly defined objectives and metrics that are aligned with the company's overall vision and mission;
- Business goals and a metrics tracking process that measures the achievement of the company's objectives;
- Specific strategies or plans for the operating companies feeding up to the plan; and
- Documentation of analyses performed to support the strategic plan of the utility.

Although strategic planning at LGC is more robust, both companies would benefit from incorporating best practices into their short- and long-term strategic planning processes.

3. PCLP has not created a formal staffing plan.

As detailed in the background section of this chapter, PCLP had no employees at the time it was purchased from O&R. Immediately after the sale, a TSA took effect, which permitted PCLP to continue to receive services at set hourly rates from O&R for 12 months (plus an additional 6 months if needed). As part of the Settlement Agreement, CNGHC agreed to implement a staffing plan and to hire specific employees within a prescribed timeline.

Within the quarterly filings it is mandated to submit to the PUC, PCLP has included discussions related to permanent staff retained and contractor usage. These quarterly filings served as a proxy for any formal staffing plan. In its quarterly filing submitted to the PUC on May 31, 2017, PCLP indicated that it hired:

- A general manager (GM) and customer service manager as of September 30, 2016;
- A billing clerk in the first quarter of 2017; and
- An administrative assistant and two customer service representatives through an employment agency pursuant to Commission approval issued March 3, 2017¹⁰.

Additionally, PCLP indicated in the quarterly filing that it will require the additional time that the Settlement Agreement allows for to complete its hiring process of permanent staff and that it is continuing to explore the use of contractors in part or whole for the remaining positions. Specifically, PCLP plans to engage the following contractors within the next quarter:

- Vegetation management company
- Electric line construction company
- Gas operation and meter reading company
- Pole inspection/treatment company

In June 2017, the PCLP GM indicated that job postings were being planned for a gas technician and work planner. Additionally, the PCLP GM indicated that plans were underway to hire contractors for many of the services mentioned above. The PUC's audit staff recognizes that PCLP is transitioning as part of the acquisition process and assessing its resource needs based on workload projections. However, the PUC's audit staff noted that PCLP has not developed a formal staffing plan to document its decision-making process to validate and demonstrate the most cost-effective option as required by the Settlement Agreement.

It is a sound business practice for a utility to document cost-benefit analyses utilized in the determination of major decisions. PCLP has, when requesting to utilize contractors, justified the request by demonstrating the decision's cost-effectiveness. Although it appears that analyses are being completed in the decision-making process at PCLP, a formal staffing plan should include supporting documentation of any projections of expected workload and cost-benefit analyses conducted in the determination whether to utilize contractors or hire employees to provide specific services.

4. PCLP has not begun to transition three of its critical computer systems from O&R.

Per the settlement agreement, O&R was to operate, maintain, and repair PCLP's infrastructure and systems, as well as provide emergency services, under a Transition Service Agreement lasting 12 months, extendable to a maximum of 18 months or through February 2018, after which PCLP must have its own systems installed, tested, and operational. During the transitional period, PCLP has been relying on O&R's

¹⁰ PCLP intends to hire the administrative assistant and two customer service representatives as full employees upon a satisfactory passing of a 90-day probationary employment period.

existing Supervisory Control and Data Acquisition system, (SCADA), Geographic Information System (GIS), Outage Management System (OMS), Work Management System (WMS), and Asset Management System (AMS).

As of July 12, 2017, PCLP had purchased and installed its own GIS system. However, PCLP did not respond to the PUC's audit staff data requests on the progress of selecting and implementing the OMS, WMS, AMS and SCADA systems. Given that record keeping systems need to be tested in parallel with the system they are replacing to ensure accuracy, PCLP is not on track to have these systems selected, purchased, installed, and tested by the end of the TSA. Without these systems, PCLP may not be prepared to operate independently from O&R or may need to rush implementation of these systems. Rushed deployment of new computerized systems should be avoided whenever possible due to the potential for errors, incompatibilities, cost overruns, or other constraints.

5. LGC and PCLP have not submitted annual diversity reports, as encouraged by the Commission.

The Pennsylvania Public Utility Commission has encouraged utilities to proactively improve diversity in their workforce and purchasing efforts for more than two decades. In March 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 1994, the Commission issued an Order directing Section 516 utilities to file diversity status reports semi-annually rather than quarterly, to submit EEO plans annually, and to file 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 1997, the Commission's diversity filing requirements changed from semi-annual to annual.

CNGHC owns the stock of the Pennsylvania regulated subsidiaries, LGC¹¹ and PCLP. Both LGC and PCLP operate plant in-service valued at more than \$10 million and are subject to the provisions of Title 66 Section 516 of the Pennsylvania Consolidated Statutes, including the Commission's directives on diversity. Consequently, LGC and PCLP should begin filing annual diversity reports, as encouraged under 52 Pa. Code 69.809. The 1997 PUC Diversity Filing Guidelines encourages Section 516 utilities to include annually updated information for both human resources and procurement efforts, to include:

- A tabulation of the utility's workforce composition for the previous five years;
- A narrative describing the utility's diversity initiative concerning recruiting, advertising, training, promotion and retention;
- A comparison of the utility's workforce utilization to service territory availability for the prior year;

¹¹ LGC is owned via a 50/50 joint venture between CNGHC and Mirabito Regulated Industries LLC.

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- Narratives on the utility's internal, external, and subcontractor efforts aimed at increasing diversity among vendors; and,
- A tabulation of procurement purchases by classification (minority, women, and persons with disability-owned business enterprise (MWDDBE) vendors) and total procurement.

An inquiry into PCLP's filing history revealed O&R did not file an annual diversity report within its last five years of ownership. PCLP has not filed any diversity reports under CNGHC's ownership even though it hired its first employees in 2016. LGC and PCLP do not track the data necessary to file the employment figures and MWDDBE spending requested in annual diversity reports, nor are the relevant programs in place or goals established.

By initiating steps to comply with the Commission's Diversity Orders and Chapter 69 Guidelines, LGC and PCLP will be better positioned over the long-term to achieve diversity in its workforce, to meet the challenges of a multi-cultural customer base, and promote vendor diversity in the marketplace.

Recommendations

- 1. Expand the safety manual to include detailed safety topics related to gas and electric operations.**
- 2. Document and update annually LGC and PCLP's short- and long-term strategic plans.**
- 3. Develop a staffing plan to document the cost-benefit analyses used to support the decision-making process in determining staffing level resources.**
- 4. Select, purchase, install, and test all remaining computer systems required to run and manage PCLP in a timely manner.**
- 5. Prepare and file annual diversity reports with the Commission.**

IV. CORPORATE GOVERNANCE

Background

As discussed in Chapter II – Background, Pike County Light & Power Company (PCLP), Corning Natural Gas Corporation (CNG), and Leatherstocking Gas Company, LLC (LGC) are subsidiaries of Corning Natural Gas Holding Corporation (CNGHC). PCLP and CNG are wholly-owned by CNGHC, while LGC is 50% owned by CNGHC and 50% owned by Mirabito Regulated Industries, LLC (MRI), a privately held energy company. CNGHC is publicly traded on the OTCQX Best Marketplace (OTCQX) under the stock symbol CNIG. Therefore, although still largely subject to the corporate governance requirements contained in the Sarbanes-Oxley Act of 2002 (SOX) and other Securities and Exchange Commission (SEC) regulations, it is not required to follow the corporate governance rules (Section 303A) of the New York Stock Exchange (NYSE).

The CNGHC Board of Directors (Board) is comprised of eight members, including the CNG President and Chief Executive Officer (CEO) and seven external directors. The average tenure of the directors is about 10 years¹². In its proxy statement released to stockholders on March 21, 2017, the CNGHC Board determined six of the eight board members were independent based on the applicable laws and regulations and the listing standards of the NYSE. The Board met eight times during 2016.¹³ Although most matters are addressed by the full Board, the CNGHC Board utilizes the following committees to help conduct its business:

- Audit Committee – This committee is responsible for overseeing the CNGHC’s independent auditor, including appointment, retention, compensation, and performance. The committee reviews all financial statements and required financial disclosures; oversees CNGHC management’s implementation of financial controls, processes and procedures; reviews the independent auditor’s internal quality control procedures; ensures the firm’s independence; ensures there is regular rotation of the leading audit partners; and reviews and approves all services performed by the independent audit firm. The CNGHC Audit Committee is comprised of three independent Board members. Although all Audit Committee directors are financially literate, one is considered a financial expert as defined by applicable SEC rules. The Audit Committee met five times during 2016.
- Nominating and Compensation Committee – This committee is responsible for overseeing the CNGHC executive compensation program, administering the CNGHC 2007 stock plan, and reviewing and making recommendations for filling director vacancies to the full Board for approval. The Nominating and

¹² Includes 2017 directorship.

¹³ Director tenure and meeting data for the CNGHC Board of Directors and its committees was obtained from the CNGHC March 21, 2017 Proxy Statement.

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Compensation Committee is comprised of three independent Board members and met once during 2016.

- Corporate Governance Committee – This committee is responsible for developing and overseeing corporate governance policies and practices, including the CNGHC Code of Business Conduct and Ethics, Related Party Transaction Policy, and considering all other corporate governance issues that may arise. The Corporate Governance Committee is comprised of three independent directors and two non-independent directors¹⁴, and met once during 2016.

In addition to the CNGHC Board, PCLP has a five-member Board of Directors comprised of the PCLP general manager, and four CNG executive managers including the President and CEO, the CFO and Treasurer, the VP of Operations, and the VP of Energy Supply and Business Development. Because PCLP is a wholly-owned subsidiary of CNGHC, the PCLP Board is focused primarily on operational issues including obligations contained in the Transition Service Agreement (TSA)¹⁵, hiring and staffing, budgeting, strategic planning, and the overall direction of operations. At each CNGHC Board meeting, PCLP's financial position, operating results, and pending issues are reported for informational purposes or approval depending on subject matter. The PCLP Board does not have any active committees and did not meet during 2016. The PCLP Board anticipates meeting between two and four times per year in 2017 and thereafter.

LGC is overseen by a seven-member Board of Directors comprised of three executives from CNG, three executives from MRI, and one independent director as outlined in the Joint Operating Agreement between CNGHC and MRI. The CNG management on the LGC Board includes the President and CEO, the VP of Operations, and the VP of Energy Supply and Business Development. The LGC Board operates largely as though LGC is an independent entity; however, as it is largely operated by CNG employees who manage most of the operating functions, LGC utilizes CNGHC's corporate governance practices except in situations where the Joint Operating Agreement specifies otherwise. The LGC Board is responsible for reviewing and approving the LGC budget, financials, operating plans, construction projects, any related party transactions, marketing efforts, etc. Like PCLP, the CNGHC Board receives a report on LGC's financials and operations; however, they do not approve specific aspects of LGC's operations, only any additional cash investments required from CNGHC. The LGC Board does not have any active committees and met twice during 2016.

CNGHC's corporate governance documents are available for review by the shareholders and the public by visiting www.corninggas.com. Documents available on the website include:

¹⁴ Non-independent directors include Michael German, the CNGHC President and CEO and George Welch, the Chairman of the Corporate Governance Committee. Mr. Welch is not independent due to performing legal work for the company. Mr. German is not independent due to his position as the CNGHC CEO.

¹⁵ Further information about the TSA can be found in Chapter II – Background.

- Audit Committee Charter;
- Corporate Governance Committee Charter;
- Code of Business Conduct and Ethics;
- Proxy Statement; and
- Annual reports and links to other SEC filings.

Findings and Conclusions

Our examination of the Corporate Governance function included a review of the CNGHC, PCLP and LGC Boards of Directors' organization including committee structure and charters; Board fee structure; director independence; documents related to principles of corporate governance and oversight; relationships with the independent auditor, performance of non-audit services by the independent auditor and policies related to rotation of audit firms; code of ethics; annual reports to shareholders; etc. Based on our review, PCLP and LGC, even when utilizing CNGHC resources, should initiate or devote additional efforts to improving the efficiency and/or effectiveness of their corporate governance functions by addressing the following:

1. Various corporate governance documents have not been periodically reviewed and updated accordingly.

While reviewing CNGHC's corporate oversight documents applicable to LGC and PCLP, the PUC's audit staff noted that most the documents were not dated and contained no version control indicating when they were last updated. It's important to note that corporate oversight documents for PCLP and LGC are consolidated at CNG or CNGHC's level. CNG reorganized to form a holding company structure during November 2013, creating CNGHC through a share-for-share exchange. However, various documents, including CNGHC's Board of Directors' committee charters and the Code of Business Conduct and Ethics (Code), are titled as CNG documents and did not appear to have been updated since the creation of CNGHC. During discussions with select CNGHC directors, it was conveyed that no schedule for reviewing and updating oversight documents was established. The directors could not recall when committee charters were last reviewed and the CNG CEO conjectured the Code was last updated around 2012. Furthermore, PUC audit staff observed various other policy and process documents had not recently been reviewed, were outdated, or did not follow a consistent format in several functional areas (e.g., Chapter III – Organizational Structure, Chapter V – Financial Management, Chapter VI – Cost Allocations).

As mentioned above, the Code has not been updated from when CNGHC was a stand-alone company, and therefore makes no reference to CNGHC, PCLP, LGC, nor specifies to whom the policy applies although it is intended to apply to all Pennsylvania utility affiliates. Moreover, some content within the Code should be updated to align with CNGHC's holding company structure and expanding operations (through LGC and the PCLP acquisition). For example, the Code addresses relationships with competitors, customers, and vendors but not with affiliates. Although the Code addresses accurate record keeping, it focuses on the accurate reporting of information

to make business decisions, perform financial reporting, and recording work hours for payroll purposes without addressing affiliate interactions and shared services. In a holding company structure with common shared services (see Chapter VI – Cost Allocations for more information), the Code should establish the responsibility for all employees to treat ratepayers fairly in regards to activities such as accurately charging and allocating costs and tracking employee time for cost allocation purposes. Additionally, the Code provides guidance to employees on reporting potentially illegal or unethical behavior to management, HR, or anonymously to CNGHC’s legal counsel but does not provide the necessary contact information.

PCLP should amend its bylaws to align with its current corporate practices. PCLP’s bylaws were last reviewed in July 1994 under the ownership of O&R and have not been amended since PCLP was acquired by CNGHC. The PUC’s audit staff acknowledges that PCLP is still in the process of staffing the company and transitioning key operating aspects from O&R, but it should review and amend the bylaws that serve as its core governance documentation.

As a small publicly traded holding company with close employee, customer, shareholder, and Board interactions, some of the formalities and requirements needed by large companies can be impractical or burdensome while others remain important regardless of company size. Accordingly, all corporate governance documents, policies, and processes should be periodically reviewed and updated, as necessary, to ensure they reflect current operations, corporate and governance structure, emerging issues and needs, and remain relevant in providing guidance and information to shareholders, employees, customers, and other stakeholders. Maintaining up-to-date documentation and guidelines is especially important as LGC continues to grow and PCLP is fully integrated into CNGHC. Furthermore, the sudden departure or loss of an employee, especially in small companies, could leave gaps in institutional knowledge if policies, procedures, and overarching guidelines are not properly documented. Without periodically reviewing and updating corporate governance documents, deficiencies can develop in guiding policies and procedures.

2. PCLP and LGC have not developed a Nominating and Compensation Committee charter.

As introduced in this chapter’s background, CNGHC utilizes three Board Committees to help oversee the governance, and conduct the business of CNGHC and its subsidiaries including PCLP and LGC. Although PCLP and LGC each have their own Board of Directors, only CNGHC utilizes board committees. Therefore, these board committees perform their corresponding duties for PCLP and LGC. As such, committee charters have been developed for the Audit Committee and Corporate Governance Committee, but a charter does not exist for the Nominating and Compensation Committee.

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As a publicly traded entity, CNGHC is largely subject to the financial reporting and corporate governance requirements contained in SOX and SEC regulations¹⁶, as well as listing standards set by the OTCQX Marketplace¹⁷. However, because CNGHC is traded on the OTCQX, it is not required to comply with specific NYSE corporate governance rules. Regardless, the PUC's audit staff contends that it is important for all public utility companies, including PCLP and LGC, to follow the practices established in SEC, SOX, and NYSE regulations within reason as they represent industry standards.

Sections 303A.04, 303A.05, and 303A.06 of the NYSE Listed Company Manual require that all listed companies have a Nominating/Corporate Governance Committee, a Compensation Committee and an Audit Committee. Each of these committees, among other requirements, must have written charters that outline the committee's purpose and responsibilities. Key responsibilities of the Nominating and Compensation Committees as identified in Sections 303A.04 and 303A.05 should include the following:

- Identify individuals qualified to become board members consistent with criteria approved by the Board;
- Oversee the evaluation of the Board and Management;
- Perform an annual performance evaluation of the Committee;
- Review and approve corporate goals and objectives relevant to the CEO;
- Evaluate CEO performance and approve compensation accordingly;
- Make recommendations to the Board regarding non-CEO compensation, incentive plans, benefit plans, etc.

While some of these items may be performed informally or on an ad hoc basis, based on the PUC audit staff's review, there are some that are not performed or are inconsistently performed by the CNGHC Nominating and Compensation Committee or the CNGHC Board.

Because many governance responsibilities are addressed solely by the full CNGHC Board or the CNG CEO, development of a Nominating and Compensation Committee charter has not been a priority. However, several typical responsibilities of the Nominating and Compensation Committee are not being performed, or regularly performed. Additionally, these key responsibilities/processes have not been documented to guide the Nominating and Compensation Committee, or for reference by shareholders and other interested parties. Although not required, the PUC's audit staff contends that it is important for CNGHC to create a Compensation and Nominating Committee charter.

¹⁶ Section 404(c) of the Sarbanes-Oxley Act, as added by Section 989G(a) of the Dodd-Frank Act, provides an exemption to SOX Section 404(b) for smaller issuers that are neither large accelerated filers or accelerated filers, as defined by 17 C.F.R. 240.12b.

¹⁷ OTCQX lists various Eligibility, Disclosure, Financial, and Corporate Governance Standards. The Corporate Governance Standards only require the listing company to have a Board of Directors with at least two independent directors; have an Audit Committee in which the majority of the members are independent; and conduct annual shareholders' meetings, making annual financial reports available to shareholders at least 15 days prior.

3. As it performs duties for LGC and PCLP, the CNGHC Board of Directors does not have a formalized review process for Board performance and composition annually.

CNGHC finalized the purchase of PCLP from O&R on August 31, 2016. Up to this point, CNGHC's subsidiaries LGC and CNG had operated solely as a natural gas distribution holding company; however, with the purchase of PCLP, CNGHC acquired another subsidiary having about 1,200 natural gas and 4,700 electric customers. Although many of the PCLP directors had electric utility backgrounds and experience, a review of CNGHC's directors' qualifications revealed only one director, the CNG CEO, had previous experience with electric utilities. Moreover, although CNGHC's directors may periodically attend related industry conferences or visit other company facilities with the CNG CEO, no formal continuing education program is in place. The main opportunity for directors to expand their knowledge is through questioning of the CEO and other executive management employees during board meetings.

Although CNGHC is not required to comply with the NYSE Listed Company Manual Section 303A, the PUC's audit staff believes that it should follow the spirit of the requirements as a holding company of Pennsylvania regulated utilities. Various conditions surrounding CNGHC's Board composition do not adhere to Section 303A guidelines or in general raise concern over Board structure. Sections 303A.04, 303A.05, and 303A.06 require that the corporate governance, compensation, and audit committees, be composed entirely of independent directors. However, CNGHC's Corporate Governance Committee Chairman is not considered independent. Further, two CNGHC directors are officers of MRI, which is a 50% owner in the LGC joint venture. Based on the definition of an "independent director" as defined by NYSE Section 303A.02¹⁸, the PUC's audit staff questions the stated independence of these directors, because an apparent conflict of interest already exists. During 2016, one of these directors was on the Compensation and Nominating Committee and the other was on the Audit Committee and Corporate Governance Committee.

Discussions with the CNG CEO and various CNGHC directors revealed that performance evaluations of the Board, its individual directors, and its committees are rarely performed. Although Board members are elected to one-year terms and poor performance could result in a director not being considered for re-nomination the following year, a holistic performance review is not performed. The Board should annually assess its own performance and evaluate the contributions and experience brought to the table by each director to ensure they are capable of effectively handling emerging needs and priorities. Further, a May 2016 article from PricewaterhouseCoopers (PwC) suggests that performing annual board, committee, and director assessments, and acting on the results accordingly, are some of the most important steps a board can take to assess performance and improve effectiveness¹⁹.

¹⁸ SEC rules do not impose additional independence criteria but require additional disclosure in the company's form 10-K regarding the independence of board directors as found in item 407 of SEC Regulation S-K.

¹⁹ Paul, Beth, and Paula Loop. "Board composition: Maintaining high performance." PwC. May 2016. Accessed June 15, 2017. www.cfodirect.pwc.com.

CNGHC's recent purchase of PCLP and the growth of LGC has shifted the priorities and skills needed to govern the organization, thus intensifying the need for annually evaluating Board composition and director performance. Without regularly reviewing the composition and performance of the Board and its committees, CNGHC could, over time, find it is deficient in the necessary skills and experience needed to execute its strategies, maintain adequate independence, or fulfill stakeholder expectations.

4. Formal corporate governance guidelines have not been documented for LGC and PCLP.

CNGHC's established corporate governance documents, including bylaws, committee charters, code of conduct, and articles of incorporation, all contain information on key functions and processes of the Board and the organization unless otherwise noted above. For all these items, PCLP and LGC utilize CNGHC's documents to cover their respective areas. However, corporate governance guidelines for LGC and PCLP have not been established, nor are they found at CNGHC.

A company's corporate governance guidelines act as an overarching document and provide a general framework for how the Board and its committees carry out their business and responsibilities. They should provide guidance and establish the processes for key governance functions and reference complimentary governance documents such as bylaws, charters, Code of Ethics, etc. as appropriate. In general, a company's articles of incorporation and mission statement provide the purpose and vision for the organization. Corporate governance guidelines then establish the organization's core values and the general structure for guiding the governance of the organization. The charters and bylaws provide detailed processes on how the company's general structure, values, and vision will be accomplished.

For example, the CNGHC bylaws provide details on the nomination of directors; removal of directors, filling board vacancies, holding meetings, the committees to be established, etc. and are more detailed and legal in nature. Formalized corporate governance guidelines would provide additional information such as: the process and considerations for selecting/nominating directors and committee members; director expectations; performance review process for the board, directors, and committees; director continuing education program; any term limits or mandatory retirement age requirements; etc.

The PUC's audit staff acknowledges that bylaws and charters are important for daily governance and found CNGHC's bylaws and charters to be satisfactory. However, corporate governance guidelines provide a general framework for guiding key governance functions and would help to focus the organization on key areas of interest. Without guidelines, the organization could deviate in its application of key practices, vision, and values derived from the CNGHC's bylaws or charters. Although making a concession for operational purposes may often be warranted, it should be discussed and weighed against alternatives.

5. The performance evaluation for the LGC President has not been documented by an applicable Committee.

As described in Finding and Conclusion Nos. 2 and 4 of this chapter, neither the Compensation Committee Charter nor the Corporate Governance Guidelines have been documented. These two documents would typically detail the responsibilities and processes of the Compensation Committee and the processes for setting executive performance goals and evaluating results, as they relate to executive compensation. No response was provided to the PUC audit staff's direct request for a description of the process utilized for setting corporate goals and objectives and its relevance to executive compensation. Thus, the PUC's audit staff was forced to predominately rely on information from interviews with CNG executives to construct a picture of the goal setting and performance evaluation process.

The CNGHC Board of Directors reviews and approves performance goals annually in September for the executive management and director level positions including the CFO and Treasurer, the VP Administration and Corporate Secretary, the VP Operations, the VP Gas Supply and Marketing, and the PCLP general manager. Each individual meets with the CNG CEO to discuss key corporate and individual goals for the upcoming year. The CNG CEO then assigns a percentage of the company's incentive program to each individual goal based on importance. The CEO presents the collective performance goals to the CNGHC Compensation Committee (and subsequently the full Board) for approval. In October, the CEO reviews the progress made toward overall corporate goals and each individual performance goal set the previous year to determine the incentive program payout earned. The performance goals, results, and any payout earned are then presented to the CNGHC Compensation Committee and full Board.

Despite having a process in place to review the performance of the CNG and PCLP executive management and director level positions, the CNGHC Board does not directly set goals for, or review the performance of, the CNG CEO which is also the President and CEO of LGC. Although the CNG CEO has goals through the collective corporate, executive, and director level goals, no goals are set specifically for the CEO by the Board. Additionally, the CNG CEO is not part of the incentive compensation program and therefore has no link between compensation and the organization's performance other than through stock ownership.

As a small utility holding company, CNGHC has not fully implemented all oversight and performance review practices this Audit Report recommends, including an annual CEO performance review process. A key part of the Board's responsibility in leading the organization and setting its strategy, is to monitor performance and make adjustments through the CEO. CEO performance evaluations are an essential tool for helping Boards guide the strategic direction of the organization and achieve organizational goals. The CNGHC Board of Director is missing an opportunity to build clear expectations for the CEO, establish developmental goals, provide guidance, and align CEO performance and compensation with organizational objectives.

Recommendations

- 1. Periodically review and update documents applicable to corporate governance of PCLP and LGC.**
- 2. Develop a charter for the CNGHC Nominating and Compensation Committee regarding PCLP and LGC governance.**
- 3. Annually evaluate director performance and skillsets taking into consideration emerging needs and priorities, and provide director education and/or modify composition as necessary.**
- 4. Develop corporate governance guidelines for PCLP and LGC.**
- 5. Annually, set specific performance goals for the LGC President and conduct evaluations of established performance goals.**

V. FINANCIAL MANAGEMENT

Background

Financial management functions for Pike County Light & Power Company (PCLP) and Leatherstocking Gas Company LLC (LGC) are performed by Corning Natural Gas Corporation (CNG), a subsidiary of Corning Natural Gas Holding Corporation (CNGHC). CNG is responsible for capital and O&M budgeting, financial planning and reporting, treasury and auditing, accounting, etc. for all CNGHC subsidiaries, including PCLP and LGC. CNG's Chief Financial Officer (CFO) has oversight of the budgeting process, financial management functions, including internal and external financial reporting, accounting, and tax preparation, and is responsible for duties such as securing external financing, refinancing loans, and evaluating internal controls.

Reporting to CNG's CFO are CNG's general accountant and financial accountant. Their duties include reviewing journal entries, reconciling intercompany accounts, allocating expenses, processing accounts, reviewing and investigating unusual balances, and preparation and analysis of financial reports. PCLP and LGC's accounting and auditing functions are allocated and shared among these accountants, who allocate approximately 20-30% of available work hours to PCLP and another 20-30% to LGC. For more information about the sharing of services between affiliates see Chapter VI – Cost Allocations.

The budgeting process at LGC begins in September. CNG's CFO and Vice President of Operations (VP of Ops) are responsible for developing, along with input from LGC field personnel when appropriate, the capital and operating budgets. CNG management then reviews the budgets before sending it to LGC's Board of Directors. In October, the Board reviews and approves the budgets for the following fiscal year, which runs from October to September.

PCLP continues to utilize budgets created by O&R. Per CNG's VP of Ops, management intends to create capital and operating budgets for PCLP in September 2017, following LGC's procedures. Additional information about budgeting at LGC and PCLP can be found in Finding and Conclusion No. 3 within this chapter.

LGC and PCLP's capital structures for the years 2012 through 2016 are illustrated in Exhibit V-1. The capital requirements and operational situations of LGC and PCLP are vastly different. LGC was formed in 2010 with its entire infrastructure being constructed through large cash outlays and securing substantial funding. LGC only started generating revenues in fiscal year 2013 and it is unknown when they will start generating profits. In PCLP, CNGHC acquired a mature utility. The acquisition resulted in a shift in capital structure. CNGHC financed the purchase in part through a \$12,000,000 loan, which shifted debt from current to long-term and weighted PCLP's long-term debt to equity ratio more heavily towards debt.

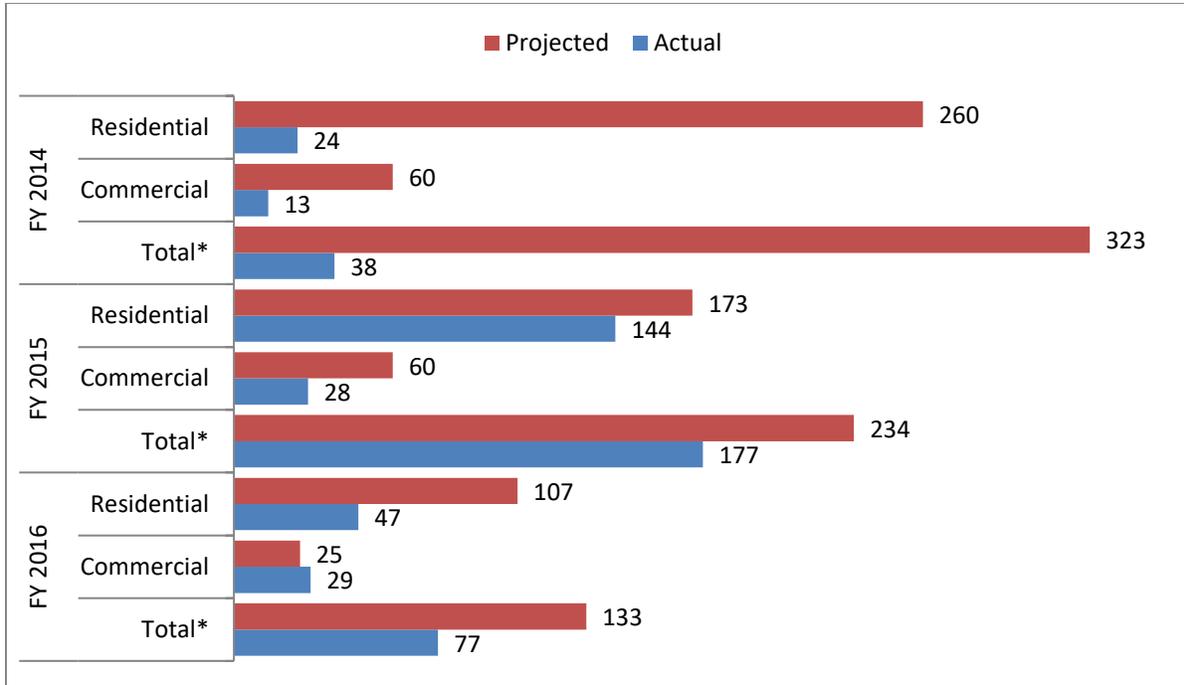
**Exhibit V-1
Leatherstocking Gas Company LLC
Pike County Light & Power Company
Summary of Capital Structure
For the years 2012 – 2016**

LEATHERSTOCKING GAS COMPANY LLC					
	FY2012	FY2013	FY2014	FY2015	FY2016
Long-term Debt	\$ -	\$ 1,050,000	\$ 3,206,724	\$ 6,073,272	\$ 6,954,544
Stockholder's Equity	\$ 192,686	\$ 457,869	\$ 1,892,896	\$ 3,948,765	\$ 4,573,919
Debt to Equity	0 / 100	70 / 30	63 / 37	61 / 39	60 / 40
PIKE COUNTY LIGHT & POWER COMPANY					
	2012	2013	2014	2015	2016
Long-term Debt	\$ 3,200,000	\$ 3,200,000	\$ 3,200,000	\$ 3,200,000	\$ 12,000,000
Stockholder's Equity	\$ 5,350,111	\$ 5,136,448	\$ 5,216,663	\$ 5,777,270	\$ 8,301,065
Debt to Equity	37 / 63	38 / 62	38 / 62	36 / 64	59 / 41

Source: Company response to Data Request FM-2 and PUC Annual Reports

PCLP's target debt to equity ratio is 60/40 which PCLP achieved as of December 31, 2016. LGC's target debt to equity ratio is a 50/50 split, but indicated that as a start-up with large capital expenditures and limited cash flow, financial decisions are more focused on the timing of capital projects and access to capital to meet obligations. The issue is compounded by sluggish conversion rates of residential and commercial customers within LGC's existing service territory. As a new utility, LGC is dependent upon new customer hookups to improve its cash flow and financial position. Exhibit V-2 illustrates residential, commercial, and total customer fiscal year forecasts in comparison to customers acquired in the same period from fiscal year 2014 through fiscal year 2016.

**Exhibit V-2
Leatherstocking Gas Company LLC
Comparison of Projected to Actual Acquired Customers
For Fiscal Years 2014 through 2016**



* Includes Residential, Commercial, Municipal, and Industrial Customers
Source: Company response to Data Request FM-2

Findings and Conclusions

Our examination of the Financial Management function included a review of accounting policies and procedures, budget process, variance reporting, etc. Based on our review, additional efforts should be devoted to improving the efficiency and/or effectiveness of its financial management function by addressing the following:

1. Various CNG financial management policies and procedures are outdated and do not account for Pennsylvania PUC regulated subsidiaries.

As mentioned in this chapter’s Background section, CNG administers LGC’s and PCLP’s financial management functions. Analysis of CNG’s financial policies and procedures revealed many informal and undated documents, and failure of more formalized policy documents to account for CNGHC’s Pennsylvania regulated utilities. The policy and procedure documents with an “IC” or “Internal Control” prefix are the most obvious examples of this. Documents with this prefix include: Cash Receipts, Revenue Cycle, and Inventory and Purchases. These documents provide insight into various processes; however, none indicate who created the process, when it was created nor when the process was last reviewed. Perhaps most concerning is that several of these documents refer to CNG employees involved in these processes by

name and not title, first name only in some instances, and that some of these names could not be found in CNG's organizational chart. In addition, the PUC's audit staff identified that PCLP and LGC lacked documented dividend policies and budgeting procedures, which are highlighted in Findings and Recommendations No. 2 and 3.

CNG's more comprehensive policies and procedures were revised prior to the acquisition of PCLP, some prior to the creation of LGC. Since the creation of LGC, the CNG organizational structure has transformed significantly. The PUC's audit staff acknowledges policies and procedures may remain unchanged after the creation of LGC, acquisition of PCLP, and change in organizational structure; however, due diligence requires PCLP and LGC management to review policies and procedures at least every three to five years or more frequently, as circumstances dictate.

2. Leatherstocking Gas Company and Pike County Light & Power Company do not have written dividend policies.

A documented dividend policy provides guidance and establishes uniform procedure to be followed by management. The policy should identify responsible parties, contain general guidelines used to determine dividend amounts, outline work flows and approval processes, and ensure the needs of the regulated utility are considered. CNGHC and its subsidiaries do not follow or possess any documented policies and procedures pertaining to issuing dividends. To be clear, neither LGC nor PCLP have issued dividends as subsidiaries of CNGHC. CNGHC only recently owned or acquired PA regulated utilities and with the acquisition of PCLP are in a state of transition. Nevertheless, the PUC's audit staff believes it is prudent to establish foundational best practices and general guidelines in policies and procedures to be followed when dividends from LGC or PCLP may be warranted in the future. Formalizing a dividend policy that identifies financial requirements, restrictions, and/or formulas that are used for determining dividend payments in addition to establishing a maximum and target dividend payout range would enhance ring-fencing efforts. Additionally, a dividend policy should include procedures for providing the PUC advance notice if a dividend payment would exceed 85% of a utility's net income.

3. Leatherstocking Gas Company and Pike County Light & Power Company do not have formal budget policies and procedures, and are not documenting budget variances.

Budgets are intended to provide a rough framework for the resources, directives, and capabilities of a company. In a regulated environment, the budget helps ensure that ratepayers are obtaining effective, reliable, and prudent service consistently across the rate base as well as ensuring the utility does not overextend its financial resources.

It is CNG's practice to prepare an annual capital and operating budget for LGC as part of the overall budgeting process for CNGHC, though LGC must budget for expansion projects. At LGC, capital projects are initiated as expansion and growth opportunities are identified and funding is secured. Therefore, the capital budget is

PIKE COUNTY LIGHT & POWER COMPANY
LEATHERSTOCKING GAS COMPANY LLC

largely driven by the addition of new customers and is drastically altered when unanticipated conditions occur. Meanwhile, an established utility like PCLP with preexisting infrastructure and customer base has less variation in its capital budget because more factors are within the company's control.

Budgeting for a newly identified capital project at LGC follows a workflow to forecast potential costs and returns. First, construction costs are estimated using permits, miles of pipe, number of potential customers, and any necessary stations or regulators as cost drivers. Once construction costs are estimated, the Vice President of Energy Supply & Business Development will verify the number and types (e.g. residential, commercial, industrial, etc.) of customers and estimate marketing costs and revenues. This data is entered into a statistical model to forecast expenditures, determine when a project will be used and useful, and determine funding sources. When asked to provide documentation of budget to actual variance reports, LGC provided a spreadsheet showing an Income Statement Schedule listing annual forecasts compared to actual costs for 2013 through 2016. The CFO informed the PUC's audit staff that monthly budget to actual variance reports are generated with written variance explanations. Examples were never provided. In addition, after CNGHC acquired PCLP in August 2016, no formal budget has been created. Therefore, PCLP is relying on a 2017 O&R created budget and could not provide any variance reports. Reportedly, CNG plans to begin budgeting for PCLP in calendar year 2018.

A comprehensive budget management policy does not appear in any of CNG's policies and procedures. Policies that cover parts of budget management exist (i.e. Financial Reporting Narratives covers budget analysis to verify balances are in accordance with Generally Accepted Accounting Principles (GAAP) and the Standard Operating Procedures policy covers capital authorizations after a project exceeds preapproved spending thresholds), but these policies are too narrow and cover only portions of proper budget management. The Utility Property Plant Equipment policy is likely the most comprehensive budget management document. The policy covers project creation and management after the capital budget is created and approved by the CNGHC Board. It also details work order setup, project responsibility, differences between tracking in-house and contracted construction costs, purchase order approvals, tracking time and materials of field employees, recording information in the accounting system, and indicates projects are reviewed by Operations Management in detail every four to six weeks. Unfortunately, despite considerable detail in parts of the policy, it does not indicate what or how these projects are reviewed. In addition, variance reporting and variance reporting thresholds were not developed with CNG management only stating that any variance is reported upon monthly. However, as mentioned earlier, no documentation was provided to substantiate this claim.

The lack of a formal documented budget and management policy along with inconsistent application of budget processes and practices could be detrimental to LGC and PCLP. It is important to have adequate budget oversight to ensure LGC and PCLP are actively controlling resources optimally. Failure to establish effective spending controls and guidelines may lead to mismanagement of financial resources or

overreliance on the knowledge and experience of CNG management without consideration for future knowledge retention.

Recommendations

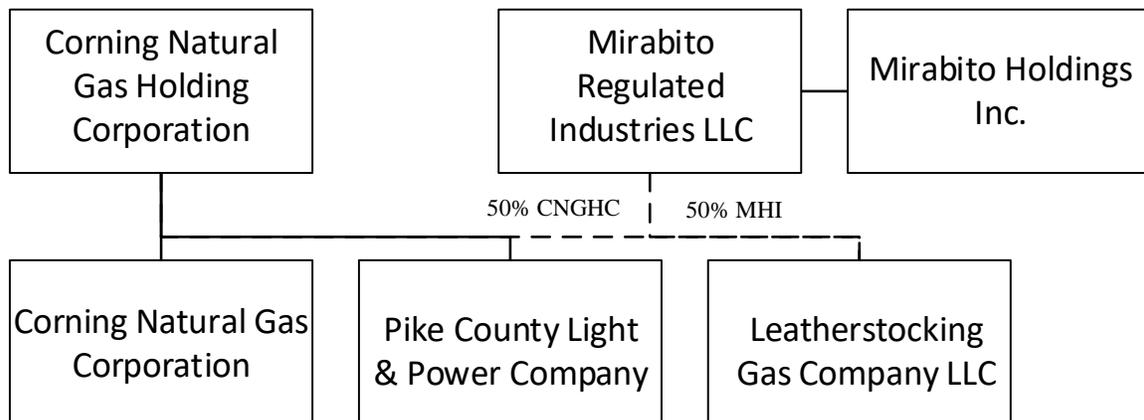
- 1. Document financial management policies and procedures for LGC and PCLP and ensure documents accurately and appropriately reflect practices in policy.**
- 2. Document an internal dividend policy for LGC and PCLP and provide advanced notice, and written explanation to the Commission for each dividend payment in excess of 85% of net income.**
- 3. Develop and document guidelines and policies for budget creation and management including the regular reporting of budget variances for LGC and PCLP.**

VI. COST ALLOCATIONS

Background

This chapter presents the results of the PUC audit staff's review of the nature and extent of transactions between Pike County Light & Power Company (PCLP), Leatherstocking Gas Company LLC (LGC), and their affiliates. As discussed in Chapter II – Background, PCLP is a wholly-owned subsidiary of Corning Natural Gas Holding Corporation (CNGHC), whereas LGC is a jointly owned subsidiary of CNGHC and Mirabito Regulated Industries, LLC (MRI). Both CNGHC and MRI have regulated and nonregulated affiliates. Mirabito Holdings, Inc. (MHI), an affiliate of MRI, provides services²⁰ to LGC, whereas CNGHC's subsidiary, Corning Natural Gas Corporation (CNG), provides services to both PCLP and LGC. Exhibit VI – 1 illustrates the relationships between PCLP and LGC's affiliates actively providing and/or receiving services and shared resources during the audit period²¹.

Exhibit VI – 1
Pike County Light & Power Company
Leatherstocking Gas Company LLC
Abbreviated Affiliate Organizational Structure
As of March 27, 2017



Note: Dashed line represents joint ownership
Source: Company response to Data Request OS-1

CNG provides management and accounting services to both PCLP and LGC. MHI provides corporate secretary services and customer service support, including billing, payment processing, collections, and operation of the customer information

²⁰ PCLP and LGC affiliate-provided services are summarized in Exhibit VI – 2.

²¹ The abbreviated organizational structure of affiliate relationships is limited to affiliates with intercompany transactions occurring with PCLP and/or LGC.

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management system (CIMS) for LGC.²² A summary of shared services provided to PCLP and LGC by the affiliates can be found in Exhibit VI – 2.

Exhibit VI – 2
Pike County Light & Power Company
Leatherstocking Gas Company LLC
Summary of Affiliate Provided Services
As of March 27, 2017

	Corning Natural Gas to:	Mirabito Holdings, Inc. to:
Pike County Light & Power	General Management Gas Supply Oversight Electric Supply Oversight Financial Reporting & Banking Regulatory Services Customer Service Support Operations Management Support	None
Leatherstocking Gas Company	General Management Gas Supply Services Financial Reporting & Banking Regulatory Services Engineering Management Operations Management Marketing	Corporate Secretary Customer Information Management System Customer Service Support

Source: Company response to Data Requests CA-2 and CA-3

Transactions between PCLP, LGC, CNG, and MHI are governed by an affiliated interest agreement (AIA) approved by the Pennsylvania Public Utility Commission (PA PUC) on April 7, 2017.²³ The AIA specifies that PCLP, LGC, CNG, and MHI may receive or provide services between all four entities. The AIA states that intercompany transactions should be charged directly; however, when direct charge is not possible, costs are allocated based upon a variety of allocation factors. The allocation factors are assigned to each specific service provided. For example, cost driver specific allocation factors are assigned for the following accounting services:²⁴

- Accounts payable processing is based upon the total number of accounts payable documents processed.
- Fixed assets accounting is based upon the total amount of fixed assets (added, retired, or transferred).
- Accounts receivable processing is based upon the number of invoices processed.

²² See Chapter X – Customer Service for additional details related to MHI provided services to LGC.

²³ Docket No. G-2013-2347335

²⁴ All allocation factors are determined as a ratio between affiliates receiving services, with totals calculated as of the preceding year ended on December 31st.

Conversely, an indirect cost driver allocation factor is assigned for general accounting, accounting research, and auditing services. CNGHC's indirect cost driver allocation factor utilizes the Massachusetts Formula (MF) and is based upon the average of assets, revenues, and payroll expense. Under the AIA, the MF is used to allocate most affiliate services.

During the 2016 to 2017 audit period, CNGHC affiliates had not fully implemented the cost allocation processes approved under its AIA. As CNGHC is comprised of regulated affiliates located in two states, New York and Pennsylvania, CNGHC submitted and received approval for its AIA from the PA PUC prior to submitting the AIA to the NY PSC. As of June 2017, the cost allocation manual (CAM) and AIA governing transactions between PCLP, LGC, CNG, and MHI were under review with the NY PSC. CNG Executive Management stated that implementation of any allocation factors was delayed to avoid any potential conflicts between the respective state Commissions.

Intercompany charges from CNG to PCLP were initiated in September 2016. The PUC's audit staff reviewed charges for the period September 2016 through January 2017 of which the majority were the result of third-party²⁵ incurred PCLP expenses paid by CNG on behalf of PCLP. As such, only a small portion of the intercompany transactions charged to PCLP resulted from CNG provided services.

All CNG intercompany charges²⁶ to PCLP from September 2016 through January 2017 occurred via direct charge and predetermined allocators. Generally, direct charging of time for CNG shared employees is limited to overtime hours, with regular work hours distributed between affiliates via predetermined allocators. Predetermined allocators are utilized for shared employees to distribute costs between entities benefiting from employee services and are preset based upon the amount of time generally spent on each entity.²⁷ For example, the CNG CFO stated that the customer affairs manager's time is split between PCLP and LGC, 75% and 25%, respectively. The PUC's audit staff requested the predetermined allocators for the shared services CNG employees; however, no documentation was provided by CNG. As such, the PUC's audit staff infers that the customer affairs manager's predetermined allocators should reflect the 75/25 allocation split, but was unable to substantiate that information without documentation.

During the 2013 to 2017 audit period, MHI and CHG did not charge LGC for services rendered. Consequently, due to LGC's small customer base and profitability, LGC service costs incurred by MHI and CNG were written off as losses.²⁸ As a newly formed natural gas utility, initial costs of capital expenditures and routine operations and maintenance expenses have naturally outpaced LGC's revenues from gas distribution.

²⁵ Third-party expenses included charges for PCLP's property maintenance, equipment leases, technical services, contractor payments, cleaning services, office supplies, etc.

²⁶ Bona fide shared service costs were limited to payroll and employee expenses charged from CNG shared service employees.

²⁷ Predetermined allocators generally do not change; however, CNG Management can request adjustments to the allocators as situations warrant.

²⁸ CNGHC and MRI recorded yearly losses totaling approximately \$200,000 each since engaging in the joint venture.

A small profit was recorded on LGC's annual report to the PUC for the calendar year ended December 31, 2016 which signals that LGC has strengthened its financial position²⁹ since LGC began serving customers in 2013.

Findings and Conclusions

Our examination of the Cost Allocations and Affiliated Transactions function included a review of the PUC approved AIA, CAM, policies and procedures, supporting data for intercompany transactions, etc. Based on our review, PCLP and LGC should initiate or devote additional efforts to improve the efficiency and/or effectiveness of their cost allocations and affiliated transactions by addressing the following:

1. The cost allocation manual governing affiliated transactions with PCLP and LGC has not been updated to document cost allocation and affiliate transaction related processes.

As of June 13, 2017, the CAM governing affiliated transactions with PCLP and LGC was complete. The CAM includes an introduction, designates responsibility for the CAM to the CNG CFO, provides a description of services, and details aspects of the cost of service and allocation methodologies. As discussed in the background section of this chapter, after receiving approval of the CAM from the NY PSC, CNG's CFO will begin implementing the allocation of shared services from CNG to PCLP. CNGHC entities will utilize numerous allocation factors including the MF and cost driver specific allocators. However, the CAM does not address the process utilized for determining the allocation factors.

National Association of Regulatory Utility Commissioners (NARUC) Guidelines for Cost Allocations and Affiliate Transactions defines a CAM as "an indexed compilation and documentation of a company's policies and related procedures." As such, the CAM should be updated to include a description of the process utilized for calculating, reviewing, approving, inputting, and testing the allocators. Further, the CAM should assign responsibilities to specified staff members for each aspect of the allocation factor process. Without documentation, PCLP and LGC risk changes to their allocating factors or those factors becoming obsolete as conditions or employees change. Documentation helps to ensure practices are executed consistently and correctly and provides a basis for business continuity. Thus, the PUC's audit staff encourages the CNG CFO to improve upon the level of detail included in the CAM.

The CAM should also address the use of predetermined allocators for employee time reporting. As described in the background section of this chapter, CNG employees who preform services for other affiliates have their time split based upon predetermined allocators. These allocators are based upon the employees' responsibilities between CNGHC affiliates. However, the CAM does not address the use of these allocation

²⁹ All PUC Annual Reports for LGC prior to 2016 reported net losses in their income statements (for the years ended December 31, 2013 – 2015).

factors. Further, the PUC's audit staff was not provided the necessary data from CNG to verify use of the predetermined allocators during fieldwork. As such, going forward the CAM should fully documented to support all processes including the use of predetermined allocators by describing the process utilized to determine, approve, assign and periodically reevaluate these factors and identify the staff members responsible for each stage of the process.

2. Mandatory refresher training for time entry is not required for shared employees.

As detailed in this chapter's background section, the PA PUC approved an AIA governing the affiliate transactions occurring between CNG, MHI, PCLP, and LGC. Under the third article of the AIA, the affiliate providing services assigns such costs directly whenever practicable. The CNG CFO stated that CNG employees who provide services to PCLP and/or LGC direct charge their time via manual employee timecards. The timecards are utilized to track any deviation from an employee's regular assignment of hours, including exceptions and use of leave. In the absence of any irregularities, the assignment of each employee's hours is automatically distributed based upon the employee's predetermined allocators. Thus, the costs of shared services charged from CNG to its affiliates are generally governed by CNG's time reporting process.

Although CNG's policies and procedures address time sheet entry, these supporting documents have not been updated since 2009, prior to CNGHC's affiliations with LGC and PCLP. As such, CNG's time reporting policies and procedures do not reflect CNGHC's new organizational structure and sharing of resources between the related parties. Furthermore, the outdated policies and procedures fail to emphasize the importance of direct charging between the affiliates, and periodic refresher training on time reporting is not required. Direct charge is generally accepted as the preferred method of charging for intercompany services; moreover, the AIA supports direct charging between affiliates whenever practicable. Therefore, the direct charge process should be fully supported by the policies, procedures, and practices implemented by the affiliate providing services to ensure that direct charging is the primary method utilized for billing the affiliate(s).

Employees providing shared services should undergo periodic training to ensure proper time reporting procedures between entities are followed. Mandatory refresher training will support the approved AIA by ensuring that charges are distributed appropriately between the related parties. Further, such refresher training should be expanded to address time sheet entry, employee expense statements, and any applicable vendor invoices. Without providing employees with mandatory refresher training, CNG may fail to capture the appropriate costs of services provided between its subsidiaries and increase the risk of cross-subsidization between the affiliates or other such errors.

3. Affiliate charges from CNG to PCLP are not properly supported by source documents.

As previously discussed, CNG provides services to PCLP. CNG provided a list of intercompany charges to PCLP between September 2016 and January 2017. Although many intercompany charges tested by PUC audit staff were traceable to third-party invoices settled by CNG on behalf of PCLP, intercompany payroll charges from CNG to PCLP were not adequately supported with documentation. Although the PUC's audit staff made multiple requests and attempts to obtain more information, CNG failed to provide source documentation for the payroll journal entry charged from CNG to PCLP. Therefore, the PUC's audit staff could not verify how CNG determined the payroll amount charged from CNG to PCLP.

As mentioned in the background of this chapter, CNGHC's organizational structure underwent significant changes in a relatively short time. Due to the timing of audit fieldwork, CNGHC's affiliates had not fully established and documented all changes for processes that were affected by the PCLP acquisition. Nonetheless, the NARUC Guidelines for Cost Allocations and Affiliated Transactions state that an audit trail should capture all transactions between a regulated utility and its affiliates. An audit trail enables an examiner to trace transactions between companies' general ledgers to supporting source documentation. For example, an audit trail for the journal entry recording payroll between affiliates, as charged from CNG to PCLP, should be traceable to source documents such as: payroll reports, time cards, employee expense reports, etc. In addition, the PA PUC approved AIA stipulates that after the last day of each month, an intercompany bill for services and expenses will be rendered; however, no intercompany bills were provided in response to the PUC audit staff's requests.

Consequently, the PUC's audit staff was unable to fully assess the Cost Allocation function due to the lack of supporting details for intercompany charges. Without source documentation, PCLP and LGC have no assurances that payroll charges billed from CNG are accurate or justifiable, thus the affiliates are at risk for cross-subsidization between companies or states. Furthermore, the continued absence of source documentation for CNG's intercompany charges could result in future regulatory concerns for the CNGHC subsidiaries. As such, the PUC's audit staff believes that CNG should conduct a review of PCLP and LGC's financial controls, establishing or updating processes as needed, to ensure the execution of charges between affiliates are appropriate, reasonable, result from substantive supporting documentation, and align with the PA PUC approved AIA.

Recommendations

- 1. Enhance the cost allocation manual applicable to LGC and PCLP to reflect all cost allocation and affiliate transaction related processes.**
- 2. Implement mandatory refresher training on time sheet entry for shared employees.**

PIKE COUNTY LIGHT & POWER COMPANY
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- 3. Ensure all charges between affiliates are appropriate, reasonable, documented, and align with the PA PUC-approved affiliated interest agreement.**

VII. ELECTRIC OPERATIONS

Background

Pike County Light & Power Company (PCLP) serves about 4,700 electric customers across Pike county. Its electric customer base is comprised of approximately 79% residential, 21% commercial and 0.1% public customers. PCLP's electric grid includes two 34.5-kV transmission circuits emanating from the Port Jervis and Cuddebackville substations. One circuit is entirely aerial and the other is partially underground providing redundancy. Electricity flows into PCLP service territory from New York. Thus, PCLP participates in the New York Independent System Operator or ISO power pool.

As of July 12, 2017, PCLP employed a general manager (GM), who oversees a customer service manager, billing clerk, administrative assistant, and two customer service representatives. PCLP also retains one part-time contracted engineer. Electric operations activities are currently performed by Orange and Rockland Utilities, Inc. (O&R), as part of the Settlement Agreement via a Transition Services Agreement (TSA), as discussed further in Chapter XI. However, PCLP intends to perform operations internally or through contracted services in the future. As of July 12, 2017, there was no target date for the transition.

Exhibit VII-1 lists the benchmarks and standards for reliability for PCLP. Exhibit VII-2 details PCLP's actual performance from 2012 to 2016, with values highlighted in green, yellow, or red, depending on if they were below the benchmark, between the benchmark and the rolling 12-month standard, or above the rolling 12-month standard.

**Exhibit VII-1
Pike County Light & Power Company
Electric Reliability Performance Benchmarks and Standards**

Benchmarks and Standards			
	SAIFI ^a	CAIDI ^b	SAIDI ^c
Benchmark	0.61	174	106
Rolling 12 Month Standard	0.82	235	195

a: System Average Interruption Frequency Index

b: Customer Average Interruption Duration Index

c: System Average Interruption Duration Index

Source: Company response to Data Request DR-EO-2

**Exhibit VII-2
Pike County Light & Power Company
Electric Reliability Performance
2012 through 2016**

Reliability Indices							
Year	SAIFI	CAIDI	SAIDI	Average # of Customers Served	# of Interruptions	Customers Affected	Customer Minutes of Interruption
2012	0.57	184	105	4493	55	2542	468,931
2013	1.21	209	188	4429	54	5449	1,137,057
2014	2.12	106	224	4429	62	9542	1,008,212
2015	0.38	205	78	4429	63	1821	366,523
2016	0.38	228	87	4550	Not Available	1735	394826

*MAIFI and CEMI data is not available.

**Green = below benchmark, Yellow = above benchmark but below Rolling 12 Month Standard, Red = above Rolling 12 Month Standard

Source: Company response to Data Request EO-2, Electric Service Reliability Reports for 2012 to 2016.

PCLP's SAIFI and SAIDI were both above the rolling 12-month standard in 2013 and 2014, and CAIDI was consistently above the benchmark, except for 2014.

Findings and Conclusions

Our examination of the Electric Operations function included a review of policies and procedures, system reliability, engineering and construction, maintenance, damage prevention, tree trimming, transition planning, etc. Based on our review, PCLP should devote additional efforts to improve the effectiveness of its distribution operations by addressing the following:

1. PCLP does not have an Electric Operations Manual.

PCLP provided various policies and procedures typically found with an operations and maintenance (O&M) manual. For instance, PCLP provided a series of schematics for construction and installation of field equipment (such as poles, wires, and transformers), substation inspection schedules and inspection checklists, instructions for operating the distribution network, defined lockout/tag out procedures, and instructions for inspection and maintenance of field equipment and substations. However, these documents were not readily available; they had to be requested from O&R, which currently performs O&M activities for PCLP. Although many of these policies and procedures can be duplicated or modified, PCLP will need to update the procedures and maintain its own manual to reflect the actual resources and practices employed upon expiration of the TSA.

It is a best practice to have a comprehensive O&M manual readily available with information on how to operate and maintain equipment and systems used by a utility. PCLP indicated that it plans to consolidate this information into an O&M manual, but had not taken the necessary steps as of July 2017. Having the information organized and readily available ensures that the information can be accessed during an emergency even by personnel unfamiliar with the specific equipment or system. It serves as a training manual for new resources or contractors as they are asked to work in an unfamiliar environment. Without accessible operation manual, emergency situations can be exacerbated or knowledge could be lost.

2. PCLP's Storm Response and Restoration Plan is outdated.

A storm response plan should be tailored to available equipment, resources, and capabilities available to the company during storm conditions or response. It should prioritize emergency repairs involving threats to human life and should include specific details in the communications section, such as contact information and preplanned messages.

PCLP's Storm Response and Restoration Plan was created by O&R, and it defines the roles of PCLP regarding communications, but does not include specifics, like phone numbers and example messages. Although O&R uses a "Company Storm Classification Matrix," as a guide to prioritize the repair orders, the matrix does not include emergency situations where a person's life is at risk, or where rescue or firefighting efforts are being prevented by damage to PCLP's electrical equipment. Lastly, the Storm Response and Restoration Plan is not tailored to PCLP's available equipment, resources, and capabilities. This will need to be modified as responsibility for operations is transferred from O&R to PCLP.

Without a storm response plan tailored to PCLP, including important data and contact information, the company may experience longer response times for emergency repairs when PCLP takes responsibility for operations from O&R.

Recommendations

- 1. Develop and periodically update an Electric Operations and Maintenance Manual specific to PCLP's system.**
- 2. Update PCLP's Storm Response and Restoration Plan and tailor it to PCLP's available equipment, resources, and capabilities.**

VIII. GAS OPERATIONS

Background

Pike County Light & Power Company

Pike County Light & Power Company (PCLP), a subsidiary of the Corning Natural Gas Holding Corporation (CNGHC), serves natural gas to about 1,200 customers in the Township of Westfall and the Borough of Matamoras. The average daily demand for all customers during non-winter months is approximately 174 thousand cubic feet (Mcf) and approximately 506 Mcf during winter months with peak day demands approaching 1,334 Mcf. The operating pressure in PCLP's service territory ranges from 12 inches' water column to 55 pounds per square inch gauge (psig). PCLP does not have any gate stations or pressure relief stations but has three district regulator stations in its service territory.

As discussed in Chapter II – Background and Chapter XI – Settlement Agreement, CNGHC took ownership of PCLP from O&R on August 31, 2016. In accordance with the Transition Services Agreement (TSA) between PCLP and O&R, O&R was to continue to provide services (i.e., personnel and equipment) to operate and maintain PCLP for a period of twelve months beginning September 1, 2016. Furthermore, in accordance with the Settlement Agreement, PCLP and O&R can modify the TSA to allow PCLP to extend the twelve-month term, on a month to month basis, for a maximum of an additional six months. PCLP hired a general manager (GM) in October 2016 to oversee and manage all work and to coordinate with O&R during the transition of services from O&R to CNGHC.

PCLP employs a contractor to perform gas and electric distribution work specific to new business such as interfacing with customers, contractors, plumbers, preparing design and work orders, final service inspections, etc. The contractor also helps investigate any field inquiries from the customer, municipality, etc. The GM indicated that hiring new staff will be based primarily on new business, outage response, leak response, inspection and maintenance. PCLP indicated it plans to hire a gas technician and a construction planner by the third or fourth quarter of 2017. The gas technician would be responsible for all gas distribution work such as meter reading, line locating, odor response, leak surveys, etc. The construction planner would oversee the electric and gas field personnel. PCLP also plans to hire a contractor to assist the gas technician in performing fieldwork such as regulator station inspections, leak surveys, corrosion control monitoring, etc. Moreover, PCLP will continue using contractors for new construction and large main/service replacement work upon expiration of the TSA.

As of December 31, 2016, PCLP had 19.6 miles of distribution main. Further discussion on the PCLP's distribution mains can be found in Finding and Conclusion No. 1. PCLP's leak classification system as shown in Exhibit VIII-1 is similar to many other gas utilities in Pennsylvania. As of December 31, 2016, PCLP had no backlogged Type 1, Type 2A or Type 2 leaks and had four backlogged Type 3 leaks. All Type 3 leaks are surveyed and monitored as per procedure.

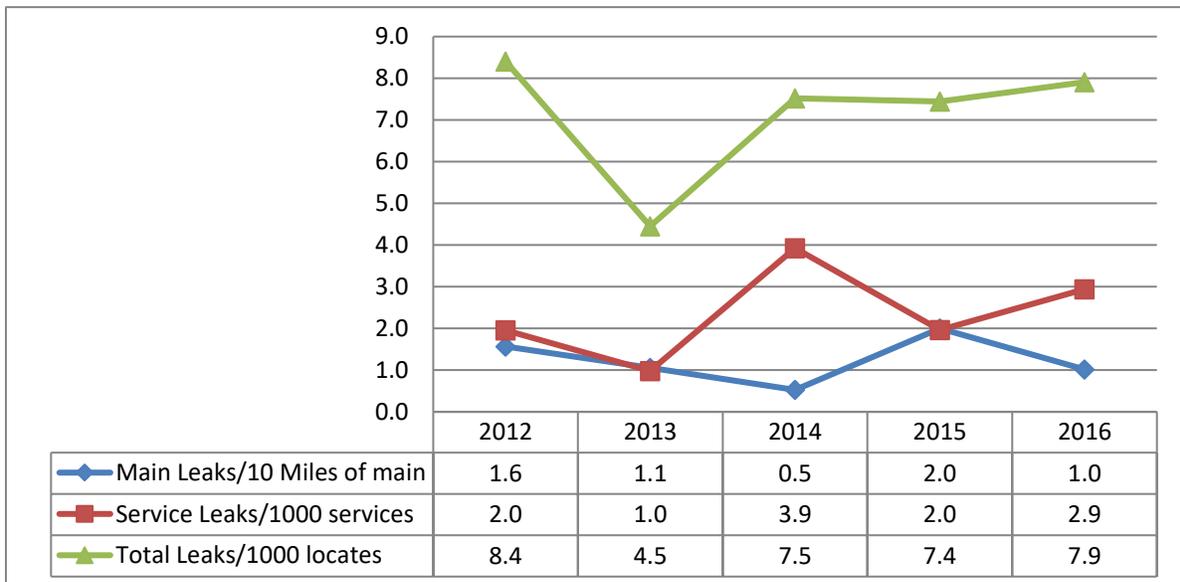
**Exhibit VIII-1
Pike County Light & Power Company
Leak Classification Definitions**

Type	Description
Type 1	A leak, which due to its location and/or relative magnitude constitutes a potential hazard to the public or buildings.
Type 2A	A leak that does not present an immediate hazard and shall require surveillance at least every 2 weeks and repair within 6 months.
Type 2	A leak that does not present an immediate hazard and shall require surveillance at least every 2 months and repair within 1 year.
Type 3	A leak that is not immediately hazardous at the time of detection and can be reasonably expected to remain that way.

Source: Company response to Data Request GO-4

PCLP’s main and service leak history metrics for the years ending December 31, 2012 through 2016 are shown in Exhibit VIII-2. PCLP averaged two main leaks and two service leaks a year during the five-year timeframe reviewed by PUC’s audit staff.

**Exhibit VIII-2
Pike County Light & Power Company
Main and Service Leaks
For the years 2012 through 2016**



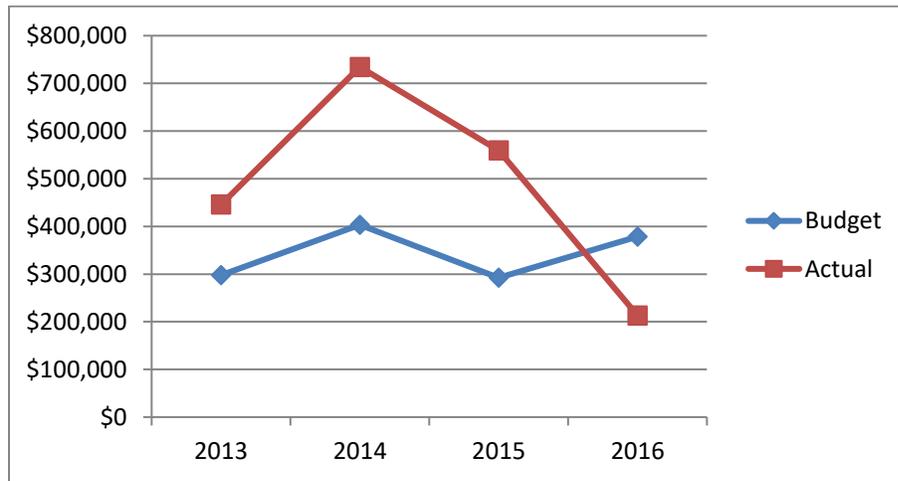
Source: Company response to Data Request GO-2, GO-3 and Auditor Analysis

PIKE COUNTY LIGHT & POWER COMPANY
LEATHERSTOCKING GAS COMPANY LLC

The low incidence of leaks is primarily due to mobile and enhanced leak survey activity performed by PCLP typically during the winter months. PCLP performs a cast iron main (eight inches or less) frost patrol by vehicle based upon temperature and frost depth. Moreover, as part of its enhanced leak survey mechanism, PCLP performs a walking frost survey of its cast iron and bare steel systems once per month from November 1st through April 30th. PCLP also performs distribution leak surveys in business districts³⁰ every 12 to 15 months. PCLP has incurred few third-party damages only suffering one line hit in the last five years.

Exhibit VIII-3 presents PCLP's operations and maintenance (O&M) expenditures for the years ending December 31, 2013 through 2016. As illustrated, PCLP experienced significant O&M budget variances purportedly due to O&R's financial system software conversion in late 2012. Further discussion on PCLP's O&M expenditures can be found in Chapter V – Financial Management.

Exhibit VIII-3
Pike County Light & Power Company
O&M Expenditures
For the years 2013 through 2016



Source: Company response to Data Request FM-1

Overtime is a critical component of the electric and gas industry and typically represents a significant part of a utility's O&M expenditures. Overtime hours worked by O&R employees on PCLP's system for the years ending December 31, 2013 through 2016 are shown in Exhibit VIII-4. The increase in overtime hours due to line location in 2016 was primarily due to the water company performing main replacement work in the Borough of Matamoras.

³⁰ Business Districts are locations where gas piping is installed under concrete or black top paving and the paving generally extends to the building lines on each side of the street.

**Exhibit VIII-4
Pike County Light & Power Company
Overtime Hours
For the years 2013 through 2016**

	2013	2014	2015	2016
Inspections	3	0	0	0
Leak Repair - Emergency	112	31	77	49
Line Locate	18	18	11	131
Trouble related	0	22	24	6
Other	2	7	10	5
Total	135	78	122	191

Source: Company response to Data Request GO-12

PCLP tests its residential and commercial meters in accordance with 52 Pa. Code § 59.21. Exhibit VIII-5 displays the meter testing results for the years ending December 31, 2013 through 2016. Beginning in 2018, PCLP plans to use Corning Natural Gas Corporation’s (CNG) meter testing procedure such that the required annual rate of test for the domestic meter population would be 4%. The meters tested would be from all age groups with the majority of meters selected from those longest in service.

**Exhibit VIII-5
Pike County Light & Power Company
Meter Testing
For the years 2013 through 2016**

	2013	2014	2015	2016
Group Population	1,208	1,212	1,206	1,212
Required to Test	58	58	57	52
Tested Amount	64	60	68	53
Number of Tests over 102%	1	0	0	0
Number of Tests below 98%	3	1	4	0

Source: Company response to Data Request GO-14

Unaccounted for gas (UFG) is also a vital part of a natural gas distribution company’s (NGDC) operations and is defined as the difference between the total amount of gas delivered to the NGDC and the amount of gas that the NGDC subsequently delivers to its residential, commercial and industrial customers adjusted for company use, temperature, pressure variations or other allowable exclusions. PCLP calculates UFG amounts and percentages from September 1 to August 31.

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Exhibit VIII-6 illustrates PCLP’s UFG amounts and percentages for the years ending August 31, 2013 through August 31, 2016. PCLP’s UFG calculations include adjustments for pressure to account for the geographic elevation of PCLP’s customer meters. In 2014, PCLP had a larger than normal adjustment primarily due to an under-registering meter at the gate station in Port Jervis. The meter was replaced in July 2014.

Exhibit VIII-6
Pike County Light & Power Company
Unaccounted for Gas
For the years September 1, 2013 through August 31, 2016

	2014	2015	2016
Gas Purchased (Mcf)	144,722	151,004	120,836
Gas Sold (Mcf)	148,362	149,615	120,342
Adjustments (Mcf)	-3,884	-785	-631
UFG (Mcf)	244	2,174	1,125
UFG (%)	0.17%	1.44%	0.93%

1 Mcf equals 1,000 cubic feet of natural gas.
Source: Company response to Data Request GO-13

Leatherstocking Gas Company

Leatherstocking Gas Company LLC (LGC), a 50/50 joint venture between Corning Natural Gas Holding Corporation and Mirabito Holdings Incorporated (MHI) was licensed to operate in Pennsylvania on September 27, 2012. LGC has 14 franchised areas in Susquehanna County and two franchised areas in Bradford County. As of December 31, 2016, LGC served natural gas to customers in Bridgewater Township, Dimock Township and the Borough of Montrose in Susquehanna County and Wyalusing Township in Bradford County. With annual sales of about 65,000 Mcf and 16.2 miles of pipe, LGC supplies natural gas to approximately 355 customers over a 262-square mile area.

LGC’s average daily demand during non-winter months is approximately 700 Mcf and 970 Mcf during winter months with peak demands approaching 1,749 Mcf. LGC primarily utilizes gas extracted from Marcellus Shale natural gas wells to serve its customers. In addition, LGC is served by two major pipelines, Williams Companies Incorporated (Williams) in Susquehanna County and Tennessee Gas Pipeline Company (Tennessee) in Bradford County. The Williams pipeline supplies local Marcellus Shale gas to LGC via three gate stations³¹. The Tennessee pipeline supplies a mixture of Marcellus Shale, Gulf of Mexico and south Texas gas via a gate station to one large customer in Bradford County. LGC expects to extend this line into Wyalusing Borough and add more customers in the future.

³¹ One of the three gate stations is owned and operated by LGC’s affiliate company, Leatherstocking Pipeline Company.

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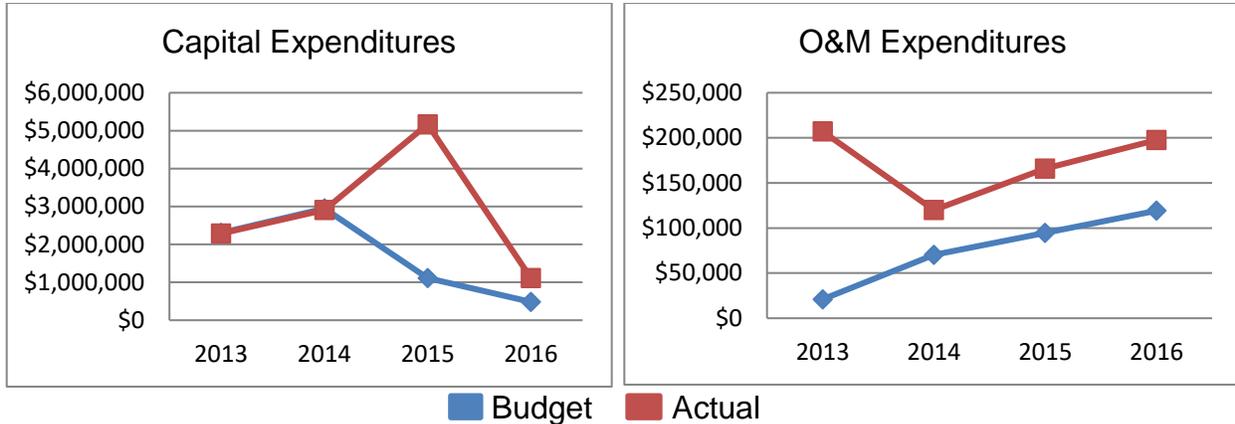
The LGC system is comprised primarily of plastic mains and services with a small portion (0.63 miles) consisting of coated cathodically protected steel main. LGC captures the locations of all its new facilities on as-built construction plans which are then transferred to its mapping system. Management indicated that LGC would likely transition into using the mapping software used by PCLP. All LGC's facilities are monitored via Supervisory Control and Data Acquisition (SCADA) controls.

LGC currently employs two gas technicians who report to the CNG Vice-President of Gas Operations. The gas technicians perform all distribution work at LGC including tasks such as line locating, inspection and maintenance activities, emergency response, meter reading, etc. The task of mapping new facilities is currently performed by a consultant. LGC plans to begin mapping facilities in-house in the future. All construction activities and major replacement work are performed by a third-party contractor. In the future, management indicated that LGC and PCLP may share resources including gas technicians.

Because LGC's distribution system is less than five years old, virtually all its main is comprised of high density polyethylene pipe. LGC's gas leak classification system is the same as that of PCLP's as shown in Exhibit VIII-1. Due to its new construction, LGC's system has not experienced a leak or break. Consequently, LGC has not performed a full leak survey of its system but performs annual leak surveys of its business district. LGC indicated that it plans to perform system-wide leak surveys on a five-year cycle starting in 2018.

Exhibit VIII-7 presents LGC's capital and O&M expenditures for the years ended December 31, 2013 through December 31, 2016. Capital expenditures include categories such as mains, services, meters, measuring and regulating stations, tools, furniture and other equipment. In 2015 and 2016, LGC spent more than forecasted in capital expenditures to expand the system in anticipation for future growth. Moreover, LGC indicated that a portion of the capital dollars forecasted in 2014 for mains and regulator stations were actually expended in 2015 which may have contributed to the large 2015 variance. Meanwhile, O&M expenditures are predominately used for the operation and maintenance of the distribution system but include other miscellaneous expenses such as legal fees, office supplies, professional fees, rent, training, etc. O&M variances were primarily due to the newness of LGC's system and lack of historical data. In 2013, LGC's system was still in its infancy, making it difficult to predict or forecast O&M costs. Furthermore, LGC did not have empirical data available to forecast O&M expenditures for the first full year of its operation causing a large variance between its budgeted and actual O&M expenditures in 2013. Further discussion on LGC's capital and O&M expenditures can be found in Chapter V – Financial Management.

**Exhibit VIII-7
Leatherstocking Gas Company LLC
Capital and O&M Expenditures
For the years January 1, 2013 through December 31, 2016**



Note: 2013 was the first full year of the LGC's existence.
Source: Company response to Data Requests FM-1 and FM-2.

LGC calculates UFG amounts and percentages on a fiscal year basis (i.e., October 1 to September 30). For consistency and comparison, the PUC's audit staff calculated UFG from September 1st through August 31st on the same basis as PCLP. Exhibit VIII-8 illustrates LGC's UFG amounts and percentages for the years ending August 31, 2014 through August 31, 2016. LGC's UFG calculations are based on physical deliveries and sales using actual meter readings at gate station master meters and customer meters. UFG calculations include adjustments for company usage such as gas used at its facilities and at customer locations for purging gas lines, etc. LGC management indicated that the negative UFG levels are primarily due to cycle billing and timing differences between customer meter readings and monthly gate station readings.

**Exhibit VIII-8
Leatherstocking Gas Company LLC
Unaccounted for Gas
For the years September 1, 2013 through August 31, 2016**

	2014	2015	2016
Gas Purchased (Mcf)	16,513	39,525	57,032
Gas Sold (Mcf)	16,092	39,951	57,690
UFG (Mcf)	421	-426	-658
UFG (%)	2.55%	-1.08%	-1.15%

1 Mcf equals 1,000 cubic feet of natural gas.
Source: Company response to Data Request GO-13

Findings and Conclusions

Our review of Gas Operations at PCLP and LGC included a review of the operation and maintenance policies and procedures, main replacement program, leak surveys, leak repair backlogs, damage prevention program, unaccounted for gas levels, capital expenditure trends, staffing levels, contractor utilization, etc. Based on our review, PCLP and LGC should devote additional efforts to improve the effectiveness of its gas operations by addressing the following:

1. PCLP has not replaced any mains or services since 2013.

As indicated in the background section, O&R performs most of the operations and maintenance work for PCLP via the TSA. Additionally, prior to September 1, 2016, O&R was responsible for PCLP’s main and service replacement activity shown in Exhibit VIII-9. As evident from the exhibit, PCLP has replaced less than half a mile of main in the last seven years. Moreover, PCLP has not replaced any mains or services from 2014 through 2016 and has no plans to replace any mains/services in 2017. The capital funds expended in 2014, 2015 and 2016 went towards leak repair, cathodic protection and municipal/new business projects.

**Exhibit VIII-9
Pike County Light & Power Company
Main and Service Replacement Activity
For the years 2010 through 2016**

Year	Main Replacement (Ft.)	Main & Service Replacement Budget (\$)	Main & Service Replacement Actual (\$)
2010	505	\$70,700	\$46,300
2011	718	\$81,600	\$43,300
2012	358	\$72,300	\$53,800
2013	623	\$43,900	\$38,300
2014	0	\$40,100	\$37,000
2015	0	\$41,400	\$76,200
2016	0	\$41,100	\$9,500
Total	2,204	\$391,100	\$304,400

Source: Company response to Data Request GO-5

Because O&R has not had a main replacement program in place for PCLP, a large portion of PCLP’s infrastructure is still composed of cast iron and unprotected bare steel. In fact, more than half of PCLP’s system is made up of cast iron and unprotected bare steel. Exhibit VIII-10 lists the miles of main by material type for the last five years.

Exhibit VIII-10
Pike County Light & Power Company
Miles of Main by Material Type
As of December 31, 2016

Material Type	Miles of Main
Bare Unprotected Steel	3.00
Cast iron	7.00
Protected Steel	3.00
Plastic	6.60
Other	0.00
Total	19.60

Source: Company response to Data Request GO-2

The current average replacement rate of 0.059 miles per year translates to a 332-year main replacement schedule for the entire system and 163-year main replacement schedule for cast iron and unprotected bare steel. Meanwhile, typically gas pipe is depreciated over a 55 to 75-year life span. With approximately 65% of PCLP's mains being more than 50 years old, the PUC's audit staff contends that PCLP will need to increase main replacement activity to eliminate all cast iron and unprotected bare steel main in a more proactive manner.

Although PCLP's leak metrics compare favorably with other similar sized utilities, as seen in Exhibit VIII-2, bare unprotected steel and cast iron pipe are prone to corrosion over time. In the natural gas utility industry, corrosion is the leading cause of pipeline leaks and failures. Furthermore, PCLP has not assessed its cast iron or bare steel main replacement requirements but rather has targeted 3,000 feet of main to be replaced annually. The main replacement goal, if solely focused on cast iron and bare steel, would achieve a 19-year main replacement rate.

PCLP management indicated that it has recently initiated a cast iron and bare steel pipe study which should be completed by the end of 2017. This study was initiated to comply with the Settlement Agreement and is a first step in determining an applicable replacement program. Subsequently, after its GIS is fully functional, PCLP will determine the sections of pipe that need to be replaced based on leak history, material type, age of pipe, etc. PCLP plans to begin its cast iron and bare steel main replacement program in the first quarter of 2018.

In March 2011, following 34 major natural gas pipeline incidents, Pipeline and Hazardous Materials Safety Administration (PHMSA) issued a "Call to Action" to accelerate the repair, rehabilitation and replacement of highest-risk pipeline infrastructure. Moreover, as part of a 2012 proceeding resulting from a natural gas

utility pipeline explosion, the Commission³² ordered UGI Utilities, Inc. to replace all its cast iron and bare steel pipe over a 14 and 30-year period, respectively. Pipelines constructed of cast iron and bare steel are among those pipelines that pose the greatest risk and hence specifically targeted by PHMSA and the PUC. Consequently, the PUC’s audit staff believes that PCLP should implement a cast iron and bare steel main replacement program consistent with its Settlement Agreement as soon as possible and target replacement of its cast iron and unprotected bare steel main in an accelerated manner.

2. PCLP does not track dispatch time for gas odor/emergency calls.

Dispatch time is measured from the time an odor/emergency call is received by the company to the time a qualified individual confirms a response. Response time is measured from the time the call is received to the time company personnel arrive at the location. LGC tracks dispatch and response times for all gas odor and emergency calls. Exhibit VIII-11 presents LGC’s dispatch and response times for 2015 and 2016. During the day, gas odor/emergency calls are received at CNG’s main office although emergency calls after hours are routed to a third-party call center located in Wellsboro.

**Exhibit VIII-11
Leatherstocking Gas Company LLC
Dispatch and Response Times
For the years January 1, 2015 through December 31, 2016**

Dispatch Time	2015	2016
0-15 minutes	100%	100%
16-30 minutes	0%	0%
Response Time	2015	2016
0-30 minutes	80%	50%
31-45 minutes	20%	50%
46-60 minutes	0%	0%
Over 60 minutes	0%	0%

Source: Company response to Data Request GO-8

Meanwhile at PCLP, gas odor/emergency calls are received by the O&R call center which in turn dispatches gas technicians to the affected location. PCLP management indicated its intention to retain the O&R call center in this capacity until PCLP implements its own Customer Information Management System (CIMS), which is expected to go-live in fourth quarter 2017³³. Although O&R tracks the overall response time for PCLP gas odor/emergency calls, it does not track dispatch times. PCLP’s

³² At Docket No. C-2012-2308997, the Commission approved a Settlement with UGI in the 2011 Allentown explosion in which, among other things, it ordered UGI to replace all its cast iron and bare steel pipe.

³³ See Chapter X – Customer Service for additional information about the CIMS transition.

response times are shown in Exhibit VIII-12. In 2015 and 2016 response times at PCLP were within 45 minutes for all gas odor/emergency calls.

**Exhibit VIII-12
Pike County Light & Power Company
Response Times
For the years January 1, 2014 through December 31, 2016**

Response Time	2014	2015	2016
0 - 30 minutes	83.7%	83.8%	67.6%
31-45 minutes	12.2%	16.2%	32.3%
46-60 minutes	4.1%	0.0%	0.0%
Over 60 minutes	0.0%	0.0%	0.0%

Source: Company response to Data Request GO-8

Title 16 New York State Code of Rules and Regulations § 255.825 require each utility to provide a monthly summary analysis to the New York Public Service Commission (NYPSC) of its performance in responding to all calls reporting gas leaks, odors and emergencies. The NYPSC does not have a requirement for NY utilities to track dispatch times for gas odor calls. The Pennsylvania Public Utility Commission, as a safety metric, asks all jurisdictional PA natural gas distribution companies (NGDC) to track and report gas odor dispatch and response times. The Commission’s Gas Safety Division of the Bureau of Investigation and Enforcement espouses the position that jurisdictional gas utilities should dispatch personnel within 15 minutes of receiving a gas odor call and respond within 60 minutes. The clear majority of utilities meeting this standard have internal dispatch procedures. PCLP management indicated that it plans to use Corning’s procedures in PA and does not plan to track dispatch times in addition to regular response times.

It is a good business practice to track gas leak call dispatch and response times to monitor, evaluate, and improve performance, particularly if systematic conditions can be identified. To emphasize this point, an investigation of an April 2009 gas explosion resulting in a fatality and injuries in the service territory of Consolidated Edison Company of New York Inc. (Con Edison), O&R’s parent company, revealed that, among other things, there was an unusually long delay in dispatching a mechanic to the site. This example highlights the importance of dispatch and response efforts and how they can significantly influence the outcome in emergency situations.

3. PCLP does not maintain all required policies and/or procedures on gas operations.

Title 49 of the Code of Federal Regulations at §192.605 states that each operator shall prepare and follow, for each pipeline, a manual of written procedures for conducting operations and maintenance (O&M) and emergency response activities.

The manual must be reviewed and updated by the operator at intervals not exceeding 15 months but at least once each calendar year. Among other items, the manual must include procedures for the following:

- Corrosion control;
- Availability pertaining to historical construction records, maps, and operating data;
- Gathering of data needed for reporting incidents in a timely and effective manner;
- Patrolling and leak surveys;
- Gas odor response;
- Start up and shut down operations;
- Safety related condition reports; and
- Surveillance, emergency response and accident investigation.

LGC maintains comprehensive operations and maintenance (O&M) procedures in accordance with 49 CFR 192.605 on all aspects of gas operations such as plastic pipe joining, corrosion control, inspections/surveys, etc. Due to the recent change in ownership, PCLP is currently using O&R's O&M procedures. However, only limited procedures were provided such as cast iron work procedures, pressure testing, plastic pipe installation, inside/outside odor leak investigation and damage to company facilities. Procedures on corrosion control, emergency response, safety, odorization, testing, etc. were not provided to the PUC's audit staff. Furthermore, some of the O&R procedures had not been updated within the 15-month requirement and in some cases, were over five years old. The PUC's audit staff also noted that LGC and PCLP maintain separate Distribution Integrity Management Plans (DIMP) with PCLP's plan included under O&R's DIMP. O&R's DIMP was last revised on December 31, 2015.

Comprehensive O&M procedures are required to be compliant with 49 CFR 192.605. Consequently, with the anticipated termination of the TSA in the spring of 2018, PCLP will need to either create its own comprehensive set of O&M procedures or adopt the procedures of CNG.

Recommendations

- 1. Accelerate replacement of unprotected bare steel and cast iron main for PCLP.**
- 2. Track dispatch times for gas odor/emergency calls for PCLP.**
- 3. Develop and maintain all gas operation procedures in accordance with federal regulations for PCLP.**

IX. EMERGENCY PREPAREDNESS

Background

Effective June 2005, 52 Pa. Code § 101 (Chapter 101) requires jurisdictional utilities to develop and maintain written physical security, cybersecurity, emergency response, and business continuity plans 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 Public Utility Commission (PUC or 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?	
2	Has your physical security plan been reviewed in the last year and updated as needed?	
3	Is your physical security plan tested annually?	
4	Does your company have a cyber security plan?	
5	Has your cyber security plan been reviewed in the last year and updated as needed?	
6	Is your cyber security plan tested annually?	
7	Does your company have an emergency response plan?	
8	Has your emergency response plan been reviewed in the last year and updated as needed?	
9	Is your emergency response plan tested annually?	
10	Does your company have a business continuity plan?	
11	Does your business continuity plan have a section or annex addressing pandemics?	
12	Has your business continuity plan been reviewed in the last year and updated as needed?	
13	Is your business continuity plan tested annually?	

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 fieldwork, the PUC’s audit staff reviewed the most recent (i.e., 2016) Self Certification Forms submitted by Pike County Light & Power Company (PCLP) and Leatherstocking Gas Company LLC (LGC). Our examination of CNG’s, PCLP’s, and LGC’s emergency preparedness included a review of physical security plans (PSP), cybersecurity plans (CSP), emergency response plans (ERP), business continuity plans (BCP), and associated security measures. In addition, the PUC’s audit staff performed inspections at a sample of PCLP’s and LGC’s facilities; including gate stations, regulator stations, substations, offices and storage facilities. In addition, Corning Natural Gas Corporation (CNG), an affiliate providing various shared support services to PCLP and LGC, was reviewed to the extent its services were critical in support or integrated with

either PCLP and/or LGC's emergency preparedness efforts. Due to the sensitive nature of the information reviewed, specific information is not revealed in this report but rather the generalities of the information reviewed are discussed.

The personnel assigned responsibility for testing, reviewing, and updating the physical security, emergency response, business continuity, and cybersecurity plans for LGC and PCLP are as follows:

- Physical Security Plan – Vice President of Operations for CNG & LGC
- Cybersecurity Plans – CNG's Vice President of Administration
- Emergency Response Plan – Vice President of Operations for CNG & LGC
- Business Continuity Plan – Vice President of Operations for CNG & LGC

Although the cybersecurity plans are ultimately the responsibility of the Vice President of Administration, actual management of cybersecurity operations is delegated to the following individuals or groups:

- Cybersecurity of CNG and PCLP – The sole IT technician under CNG's Vice President of Administration
- Cybersecurity of LGC – Mirabito Regulated Industries, LLC (MRI)

Corning Natural Gas Holding Corporation (CNGHC) purchased PCLP from Orange and Rockland Utilities, Inc. (O&R) on August 31, 2016. As discussed further within Chapter XI – Settlement Agreement, O&R will continue to provide services to PCLP as part of a transitional services agreement (TSA) up to 18 months, ending in February 2018. Meanwhile, LGC was created by CNGHC in September 2012. Because of the relative newness of LGC, and the very recent transition of ownership of PCLP, there are organizational and operational issues that have contributed to the findings in this chapter.

Findings and Conclusions

Our examination of Emergency Preparedness at CNG, LGC and PCLP included a review of their physical security plans, cybersecurity plans, emergency response plans, and business continuity plans and all associated security measures. Based on our review of emergency preparedness efforts at CNG, LGC, and PCLP, the companies should initiate or devote additional efforts to improving their security planning and preparedness procedures by addressing the following:

1. PCLP does not have an emergency response plan and LGC's ERP needs to be updated.

PCLP relies on O&R's existing emergency response plan. PCLP has its own communications and outreach plan, but this merely defines PCLP's responsibilities in support of O&R's ERP.

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Per 52 Pa. Code § 101.3(a), a jurisdictional utility shall develop and maintain written physical security, cybersecurity, emergency response, and business continuity plans, and per 52 Pa. Code § 101.3(a)(4) an emergency response plan should, at a minimum, contain the following:

- Identification and assessment of the problem;
- Mitigation of the problem in a coordinated, timely and effective manner; and
- Notification of the appropriate emergency services and emergency support agencies and organizations;
- It must be reviewed and updated annually;
- It must be tested annually; and
- It must define roles and responsibilities by individual or job function.

LGC has a comprehensive ERP, including a description of the distribution system; rules governing distribution, accessibility, and the revision process for the plan; a communications plan; a description of the incident command system; guidance for classification of emergency types; emergency field guidelines; mutual aid plans; gas control; equipment and materials; annual training; post emergency assignments; post incident evaluation; emergency contact lists, including emergency responders, government organizations, contractors, and media outlets; report templates related to incidents, interruptions, and damages; and an organization chart of the National Incident Management System (NIMS) command structure.

Despite the comprehensive ERP, the PUC's audit staff identified two deficiencies. LGC's ERP does not have a provision as required in 52 PA Code Section 67.1 (b) to notify the PA PUC whenever 2,500 or 5% of its total customers, whichever is less, have an unscheduled interruption in a single event for six or more projected consecutive hours. The ERP also does not list contact information for reporting these interruptions to the PA PUC. The second issue with LGC's ERP is that it has not been updated since July 1, 2015. ERPs as required by 52 Pa. Code § 101.3(a)(4) are to be reviewed and updated annually. Although the PUC's audit staff recognizes that PCLP and LGC are in a transition period, management needs to prioritize developing a fully documented plan for each company.

PCLP intends to model its ERP on LGC's existing plan; however, resources have not yet been dedicated to accomplish this. Failing to adopt its own ERP will cause PCLP to be ill prepared to take full responsibility for emergency response when the TSA expires. Moreover, consideration should be given to developing a unified or consolidated ERP, separated into sections to reflect differences in the companies. This would be an efficient way to unify the companies' response to potential emergencies and reduce the work involved in maintaining separate ERPs for each company. In addition, a risk analysis or vulnerability assessment, conducted with emergency preparedness in mind, prior to implementation of the new ERP, would help identify any areas for improvement both in planning and implementation.

2. PCLP does not have a physical security plan and LGC lacks critical elements to its plan.

Although PCLP has some elements of a PSP in place (i.e., physical security measures implemented at its Milford main office), a documented plan was not completed as of July 12, 2017. Meanwhile, LGC's PSP was limited in addressing only the corporate physical security goal of company properties and a description of existing security equipment and measures. LGC's plan does not identify how it will protect personnel, critical equipment or continue reliable service and does not include any information on risk analysis. Although LGC has informally identified its critical facilities, it has not documented them within its PSP. The PSP also does not contain a provision to annually test, update, or review the PSP, which was last revised on July 1, 2015.

Per 52 Pa. Code § 101.3(a)(1) a physical security plan should, at a minimum, contain the following:

- Specific features of a mission-critical equipment or facility protection program;
- Company procedures to follow based on changing threat conditions or situations;
- Defined roles and responsibilities by individual or job function;
- Annual review and update of the plan; and
- Maintain and implement an annual testing schedule of the plan.

Because PCLP and LGC share management with CNG due to the recent ownership transition, the companies acknowledged that adequate resources have not been dedicated to fully developing a documented PSP respective to each company. Consequently, the companies lack uniform standards and response plans which could result in a deficiency in their ability to effectively respond to intrusion threats.

One option to consider, as discussed in the previous finding, is to develop a unified or consolidated PSP for the companies, broken out into separate sections where necessary to reflect differences in resources and capabilities. An effective approach to designing a PSP would focus on the concept of, "defense in depth," utilizing multiple independent layers of security to protect critical equipment and systems, including the physical security of cyber assets. A risk analysis or vulnerability assessment, conducted with physical security in mind, prior to implementation of the new ERP, would help develop a comprehensive plan that addresses known risks. The vulnerability assessment would also help to categorize required security levels for different types of facilities, and define security requirements, thus providing PCLP and LGC capital investment priorities for physical security improvements.

3. PCLP and LGC do not have sufficient business continuity plans.

Due to the transition from O&R to CNGHC's ownership, PCLP does not have a BCP but instead relies upon O&R for business continuity support through the TSA. The LGC BCP consisted of a goal to ensure the security of customer billing information and facilities maps and records, and a basic description of its office and record keeping

procedures. Furthermore, the Vice President of Operations at CNG and LGC was unaware that LGC had a BCP, but stated that there were plans to create one.

In practice, LGC has elements of a BCP in place (i.e., customer service data backup process, hardcopy records, electronic maps, and a backup facility that can be accessed remotely for customer data if the operations center in Montrose, PA is unavailable, etc.) but these practices remain undocumented. Moreover, LGC has not identified how long it can operate without specific systems, departments, or equipment nor has it identified or prioritized minimum staffing levels for critical business tasks. It also lacks an up-to-date list of critical customers. Furthermore, LGC's BCP does not contain a provision to regularly test and review the BCP.

Per 52 Pa. Code § 101.3(a)(3) a business continuity plan should, at a minimum, contain the following:

- Guidance on the system restoration for emergencies, disasters, and mobilization;
- Establishment of a comprehensive process addressing business recovery, business resumption, and contingency planning;
- Defined roles and responsibilities by individual or job function;
- Annual review and update of the plan; and
- Maintain and implement an annual testing schedule of the plan.

In general, LGC and PCLP have not prioritized a fully developed BCP due to the ownership transition. Although this is understandable and some elements of a BCP are in place at both companies, the lack of documentation/planning could exacerbate an emergency if left uncorrected. Furthermore, the business continuity needs of PCLP will change with the expiration of the TSA. Recent natural disasters of Hurricanes Harvey, Irma and Maria highlight the importance of planning and preparedness.

4. Cybersecurity plans and programs for PCLP and LGC are incomplete.

As mentioned previously, PCLP continues to receive services from O&R through February 2018 as part of the TSA. O&R is currently managing the customer and system data for PCLP. Consequently, PCLP has not created its own Cyber Security Plan (CSP), but PCLP will need to have a fully developed plan once the TSA expires.

LGC maintains an employee handbook which serves as its pseudo CSP dedicated to IT security but it is limited to employee data handling guidelines. More specifically, LGC defines data as sensitive or non-sensitive, with a requirement that employees refrain from disseminating data and use specific protective measures when handling it. In addition, the employee IT security handbook includes a general discussion on detection and avoidance of malware and social engineering. This is a very good example of an employee handbook dedicated to cybersecurity, but does not constitute a CSP.

A CSP should include guidelines for response to cyber incidents, identification and ranking of critical cyber components and systems, identification of how long the company can operate without critical cyber components, contacts for law enforcement and national security agencies, incident response guidelines and objectives, requirements for verification of vendor cybersecurity controls, a process to manage cybersecurity in the replacement or upgrade of network equipment, requirements for vulnerability analysis and risk assessment, and requirements to test and revise the plan annually.

Some of these topics have been informally addressed at LGC but remain undocumented. Standard security features, requirements, or customizations are not documented at PCLP and LGC. Furthermore, there is no formal program for monitoring end-of-life cycles for hardware or software or tracking process for hardware.

Furthermore, a cybersecurity risk analysis has never been performed for either PCLP or LGC. Risk analyses are useful in the identification of risks and mitigation strategies prior to the deployment of new systems. PCLP is currently in the process of deploying multiple systems without the benefit of cyber security criteria for vendor or device selection other than relying on industry standard systems. CNG currently provides IT support for PCLP and LGC. Although audits of CNG relating to cybersecurity have been performed by external agencies, these audits did not include threat assessment or risk analysis, nor did they include PCLP or LGC. Moreover, no vulnerability assessment, penetration testing, or risk assessment has been completed for PCLP or LGC.

Per 52 Pa. Code § 101.3(a)(2) a cyber security plan should, at a minimum, contain the following:

- A list of critical functions requiring automated processing;
- Appropriate backup for application software and data, which may include separate distinct storage media for data or a different physical location for application software;
- Alternative methods for meeting critical functional responsibilities in the absence of information technology capabilities;
- A recognition of the critical time period for each information system before the utility could no longer continue to operate;
- Annual review and update to the plan; and
- Maintain and implement an annual testing schedule of these plans.

Another major component of cybersecurity should focus on training. Although the above IT security employee handbook provides a good foundation for employees, PCLP and LGC lack a proper cybersecurity training component. An individual from CNG's IT department currently educates, "by crises," as things go wrong, rather than by a proactive, formal training process and notification process. Development and implementation of a formal training and notification program for cyber threats would be beneficial.

Overall, there appears to be a lack of focus on cybersecurity. Without a clear responsibility and drive, cybersecurity can often be ignored or overlooked. Lack of focus can lead to vulnerabilities and data loss. Furthermore, because PCLP is in the process of deploying new computer systems for many of its functions that will be presumably tied with LGC and/or CNG, the companies could benefit from deploying cybersecurity measures now as part of the systems integration process, rather than after the new systems are already in place. To aid in this, PCLP, LGC and CNG should consider creating a unified cybersecurity plan or deployment plan.

5. PCLP and LGC lack sufficient IT resources.

As mentioned in Finding and Conclusion No. 4 within this chapter, CNG currently provides IT resources and support for LGC, and will begin providing IT resources and support for PCLP as the TSA expires. The IT staff consists of a single full-time technical staff member reporting to the Vice President of Administration at CNG providing support to PCLP, LGC and CNG.

PCLP and LGC have not identified how long operations can be sustained without critical cyber components. Additionally, no cyber security risk analyses have been performed, though management indicated that utilizing a third-party contractor is under consideration. Some of the cyber security processes are regularly tested, but the resources are not available to conduct more extensive testing. Discussions with the IT department indicate that it is currently unable to perform certain scheduled testing, updates, training, and other maintenance activities. As mentioned in Finding and Conclusion No. 4 within this Chapter, the cybersecurity posture could be improved.

PCLP is planning to bring several new systems online by February 2018 as part of the transition of services from O&R (See Finding and Conclusion No. III-4 for more information). These systems will require additional regular maintenance and management, which increases the staffing and resource requirements above current levels.

Consequently, management intends to address IT resource needs by first hiring a third-party contractor as a Chief Technology Officer. Due to concerns regarding sufficient resources to manage IT needs, it would benefit PCLP, LGC and CNG if they were to evaluate the staffing needs of the IT team or teams periodically, to examine the need for additional personnel or resources. As additional systems are deployed at PCLP and new hires/resources become familiar with new responsibilities and equipment, the companies should reevaluate resource needs.

6. PCLP and LGC have not performed vulnerability assessments or penetration testing.

No risk analysis or vulnerability assessment has ever been performed at LGC or PCLP under CNGHC's ownership. Additionally, no penetration testing is currently performed on systems utilized by LGC or PCLP. CNG's IT staff are considering hiring a

third-party contractor to provide cyber penetration testing and cyber risk analysis for all affiliates including PCLP and LGC, but this was not finalized by the end of fieldwork. CNG's IT staff (on behalf of PCLP and LGC) does not formally perform vulnerability assessments as part of its acquisition cycles for cyber security, SCADA, network devices, or web hosting services but rather relies on industry standard equipment, entrusting that security protocols have been established.

PCLP and LGC have a reactive approach and have not placed a high priority on identification of potential security vulnerabilities. This may lead to inefficient efforts to increase or maintain security, and unprotected vulnerabilities. Without an external analysis of PCLP and LGC physical and cyber security, any existing vulnerabilities will continue unidentified and may lead to a breach.

Per 52 Pa. Code § 101.3(a), a jurisdictional utility shall develop and maintain written physical security, cyber security, emergency response, and business continuity plans. Part of maintaining physical and cyber security plans is evaluating existing security, and evaluating the plans with respect to new and emerging threats. Penetration testing can be extremely helpful in understanding the strengths and weaknesses of a company's security. The PUC's audit staff recommends penetration testing by a trusted third-party, both for cyber and physical security, so as to allow the company to benefit from external testing and expertise. In addition, periodic vulnerability assessments make it possible to evaluate plans with respect to new and emerging threats. Several government agencies offer assistance with vulnerability assessments and risk analysis. The Department and Homeland Security, for instance, offers vulnerability assessments to critical infrastructure operators. The PUC's audit staff recommends performing vulnerability assessments a minimum of every 5-10 years, to keep pace with the changing threat environment. The Commission further recommends penetration testing annually, to maintain an awareness of security status and potential weaknesses.

7. Physical security deficiencies were noted during inspections of PCLP and LGC facilities.

Physical security should be continuously reviewed and inspected and deficiencies should be addressed as soon as possible. Ideally, risk mitigation should be incorporated into physical security requirements with critical facilities warranting additional security measures. The PUC's audit staff randomly inspected several facilities at LGC and PCLP including office, storage, and operations facilities, while focusing on compliance as well as identification of vulnerabilities.

Several minor vulnerabilities or deficiencies in physical security were noted. Most deficiencies were due to facility age, oversight, weather, or general wear and tear. Many of these deficiencies could have been addressed, had regular security inspections or reviews been conducted. Additional physical security measures should be considered at facilities that contain systems, records, and IT infrastructure critical to the functioning of PCLP and LGC.

To reduce risks, PCLP and LGC should correct the minor physical security deficiencies identified by the PUC's audit staff and perform ongoing physical security reviews of all facilities.

8. LGC lacks first aid kits and fire extinguishers at several locations, and safety data sheets (SDS) at all locations.

OSHA regulation 29 CFR 1910.157(c)(1) requires that an employer must, "Provide portable fire extinguishers and mount, locate, and identify them so that they are readily accessible to employees without subjecting the employees to possible injury." Additionally, OSHA regulation 29 CFR 1910.151(b) requires that:

In the absence of an infirmary, clinic, or hospital in near proximity³⁴ to the workplace, which is used for the treatment of all injured employees, a person or persons shall be adequately trained to render first aid. Adequate first aid supplies shall be readily available.

OSHA regulation 29 CFR 1910.1200(a)(1) states:

The purpose of this section is to ensure that the hazards of all chemicals produced or imported are classified, and that information concerning the classified hazards is transmitted to employers and employees...The transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include container labelling and other forms of warning, safety data sheets and employee training.

LGC has no safety data sheets (SDS) at any of its locations. CNG utilizes an online SDS program, which LGC intends to adopt, but had not implemented as of July 2017. Conversely PCLP does not currently store any chemicals onsite which alleviates the need for any SDS at this time. Also, LGC does not maintain fire extinguishers at certain gate stations and various locations lacked first aid kits. Consequently, the addition of fire extinguishers, first aid equipment, and SDS information, which are supported by OSHA regulations, would improve safety and reduce the risk of accidents.

Recommendations

- 1. Develop an Emergency Response Plan for PCLP and update LGC's Emergency Response Plan and review, test, and update it annually.**
- 2. Develop Physical Security Plans for PCLP and LGC, and review, test, and update them annually.**

³⁴ Interpreted by OSHA as a maximum of three to four minutes away.

- 3. Develop comprehensive Business Continuity Plans for LGC and PCLP and review, test, and update them annually.**
- 4. Develop comprehensive Cybersecurity Plans for LGC and PCLP, and consider utilizing a cybersecurity risk analysis or cyber vulnerability assessment.**
- 5. Increase IT resources at PCLP and LGC and review IT resource needs regularly.**
- 6. Engage a trusted outside agency or security specialist to conduct a vulnerability assessment and penetration test on PCLP and LGC facilities periodically.**
- 7. Correct minor deficiencies in physical security at PCLP and LGC facilities, implement a system of security inspections at all facilities, and improve security measures.**
- 8. Review and modify LGC's policy of not providing fire extinguishers at gate stations, and provide adequate first aid equipment, extinguishers, and safety data sheets at all work locations.**

X. CUSTOMER SERVICE

Background

Leatherstocking Gas Company

As of December 31, 2016, Leatherstocking Gas Company LLC (LGC) served 355 natural gas customers in Pennsylvania. As discussed in Chapter II – Background, LGC is a 50/50 joint venture between Corning Natural Gas Holding Company (CNGHC) and Mirabito Regulated Industries, LLC (MRI). In its effort to promote growth LGC instituted a hot water heater rebate program³⁵. Customer service functions for LGC are supplemented by Mirabito Holding, Inc. (MHI) staff, an affiliate of MRI.³⁶

CNG's Vice President of Operations (VP Ops) provides oversight of LGC's customer service organization. LGC employees report directly to the CNG VP Ops, while MHI's customer service support staff and the CNG Vice President of Energy Supply and Business Development (VP S&B) report indirectly to CNG's VP Ops but reporting is limited to activities related to LGC. The CNG VP S&B has oversight of LGC's marketing and public relations, including its social media presence. MHI customer service support includes emergency and outage call support, billing, receipt and application of customer payments, collections, etc. In addition, LGC's customer information management system is operated and managed by MHI.

LGC's office located in Montrose, Pennsylvania and is open weekdays from 8:00 am until 4:30 pm. The LGC office manager is responsible for:

- assisting walk-in customers;
- answering customer telephone calls;
- distributing service applications;
- receiving customer payments³⁷;
- entering notes on customer accounts;
- serving as a liaison for customers requiring payment arrangements with MHI and/or other payment assistance for low-income customers with third-party organizations (i.e., charitable and community groups);
- tracking customer complaints and field service orders; and
- relaying service order requests to LGC's gas technicians.

LGC's gas technicians are responsible for field services, including emergency response, meter reading, and terminations. For additional information related to LGC gas technician responsibilities, see Chapter VIII – Gas Operations.

³⁵ LGC's Hot Water Heater Rebate Program provides for a \$100 or \$200 rebate (depending upon the unit's efficiency factor) to customers converting to natural gas hot water heaters.

³⁶ For additional information related to the services provided by MHI to LGC, see Chapter VI – Cost Allocations.

³⁷ The LGC office manager can accept in-person checks or money orders; however, these payments must be forwarded to MHI for processing due to operational constraints.

Pike County Light & Power Company

As of December 31, 2016, Pike County Light & Power Company (PCLP) was serving approximately 4,700 electric and 1,200 natural gas customers within the Commonwealth. As described in Chapter II – Background, CNGHC acquired PCLP from Orange & Rockland Utilities, Inc. (O&R) on August 31, 2016. As part of the transition service agreement (TSA), O&R was obligated to provide customer service functions to PCLP customers for a one-year period after the transfer of ownership to CNGHC.³⁸ As of July 12, 2017, all customer service functions except for new business continued to be provided by O&R. PCLP's new business services and installations for customers are handled by PCLP through an independent contractor. Under the TSA, O&R provides customer call support, billing, meter reading, payment processing, collections, low-income customer assistance, and field support services. PCLP anticipates that all customer service functions will be performed either internally or by an independent contractor(s) beginning in October 2017.

The PCLP general manager (GM) is responsible for reviewing and approving monthly O&R invoices, including the billing for TSA-provided customer services. O&R provides supporting documentation with the invoices; however, the PCLP GM may request additional details from O&R for clarification of charges and/or billing adjustments. These requests are resolved generally within one to two business days by O&R and may result in a credit on the following month's bill or in a revised invoice from O&R to PCLP. After approval from the PCLP GM, the O&R invoices are forwarded to the Corning Natural Gas (CNG) President and Chief Executive Officer (CEO) and CNG Chief Financial Officer for final review, approval, and payment. As discussed in Chapter II – Background, the CNG CEO has oversight of the CNGHC organization, including PCLP. As such, the PCLP GM reports directly to the CNG CEO.

As of June 29, 2017, the PCLP organization structure was comprised of four positions reporting solely to the PCLP GM. These positions included an administrative assistant, two customer service representatives (CSRs), and a billing clerk. PCLP's GM was in the process of posting job openings for a work planner and gas technician in the second quarter of 2017. In addition to the PCLP employees, PCLP's customer service function is supported by a shared CNG employee. The customer affairs manager, an employee of CNG, is responsible for facilitating PCLP's Universal Service Plan³⁹ (USP) and performs marketing, business development, and public relations for all CNGHC regulated utilities⁴⁰. As such, the customer affairs manager reports to both CNG management concerning CNG and LGC and to the PCLP GM for PCLP-related activities.

PCLP's administrative assistant reports directly to the PCLP GM and is responsible for tracking new business applications, updating the PCLP website and

³⁸ Under the TSA, PCLP has the option to extend the one year contract for an additional six months, on a month to month basis, with Commission approval.

³⁹ PCLP's Universal Service Program includes a hardship fund which provides payment assistance to qualifying low-income customers.

⁴⁰ As discussed in Chapter II – Background, CNGHC is the parent company for both CNG and PCLP. In addition, CNGHC holds 50% ownership interest in Leatherstocking Gas Company as part of a joint venture with Mirabito Regulated Industries, LLC (MRI).

social media presence, and providing customer service functional support during electric or natural gas emergencies, storms, etc. PCLP's work planner will be responsible for distributing work orders to PCLP's future technician(s) or independent contractor(s) and these positions will report directly to the PCLP GM. During fieldwork, PCLP's work planner position had not been filled. As discussed in Chapter VII – Electric Operations and Chapter VIII – Gas Operations, PCLP may opt to hire internal field service technicians or utilize independent contractor(s) to fulfill field service work⁴¹ for its customers.

PCLP's CSRs have dual reporting lines of authority to CNG's customer service manager (CSM) and the PCLP GM. The CNG CSM provides expertise on the customer information management system (CIMS) and guidance for day-to-day system operations; whereas general management oversight is provided by the PCLP GM. Similarly, PCLP's billing clerk, who works onsite at CNG, is supported by CNG but reports directly to the PCLP GM. In addition, CNG's executive management plans to utilize LGC's two gas technicians for ancillary support of PCLP's gas operations (i.e., emergency response, leak inspections, etc.). LGC's gas technicians will report to PCLP's GM on all PCLP-related services in addition to reporting to CNG's Vice President of Operations (VP Ops) on performance of LGC-related services.

PCLP's CSRs will provide customer services both in-person and over the telephone, addressing receipt of payments, billing inquiries, service orders, customer complaints, and collections. As of June 2017, all newly hired PCLP employees (including both CSRs and the billing clerk) were being trained on CNG's test module of the CIMS. Although both CNG and PCLP will operate with the same CIMS software, the PCLP version will also support an electric billing module. Upon implementation, PCLP's CIMS will provide data to support PCLP's website (including its customer interface), work order management system, and outage management system.

On April 30, 2017, PCLP received the first iteration of PCLP's customer data for transfer to its CIMS. A subsequent iteration of PCLP's customer data was transferred from O&R to PCLP in June 2017 to include updated customer account history, with regular updates to follow prior to the transition from O&R-provided services to PCLP independent operations. PCLP began conversion and testing⁴² of customer data after receipt of customer information from O&R. CNG's management anticipates that the PCLP CIMS will be ready for Go-Live by the end of September 2017.

In tandem with the Go-Live of the PCLP CIMS, meter reading and billing will also transition from O&R. PCLP has engaged a third-party contractor for meter reading services to preserve the single billing cycle for all PCLP customers. Going forward, PCLP may choose to modify its current customer billing by introducing additional billing cycles.

⁴¹ Field services will include emergency response, installations, meter reading, maintenance work orders, gas surveys, collections, terminations, etc.

⁴² Testing of customer data includes matching of customer account data between PCLP's CIMS and O&R's CIMS.

Findings and Conclusions

Our examination of the Customer Service function included a review of PCLP's customer service organization, implementation of its customer management information system, customer communications, training of new employees, preparation for the provision of customer services, etc. The PUC audit staff also reviewed LGC's customer service policies and procedures, customer service organization, customer management information system, billing processes, customer communications, etc. Based on our review, PCLP or LGC should initiate or devote additional efforts to improve the efficiency and/or effectiveness of their customer service functions by addressing the following:

1. The monthly meter reading process is overly manual and inefficient at LGC.

LGC conducts its monthly meter reading and billing via a single cycle. LGC utilizes manual read gas meters which must be individually read; however, due to its small customer base (i.e., approximately 350 customers) and compact service territory, the two LGC gas technicians complete meter reads for all customers within a one-day period. LGC also acquired a new large commercial customer during 2017 in Bradford County and plans to expand its services to residential customers in the surrounding area. Depending upon LGC's level of customer growth and service territory expansion, LGC may need to employ multiple meter reading cycles in the future.

The meter reading cycle process is initiated when route sheets are generated from LGC's CIMS by MHI's manager of operations. The MHI manager of operations exports the route sheets from the CIMS to portable document files, which are sent via email to the LGC office manager. Route sheets are then printed out as hard copies and distributed to the gas technicians. Meter readings are recorded manually for each corresponding meter account. Completed route sheets are then submitted to MHI's manager of operations. The following business day, the MHI manager of operations manually enters the meter data from the route sheets into the CIMS. The MHI manager of operations runs low to high and high to low usage reports to identify any outliers. All accounts with outliers are reread for accuracy and quality assurance, then all bills are mailed the following business day.

Even with the manual process, due to LGC's size, the meter reading and billing process is generally completed within two business days. Nonetheless, LGC's process requires duplicative work as the handwritten meter reads must be reentered into LGC's billing system. Further, duplicative processes are inefficient and increase the risk of data entry errors for billing. There are potentially low cost solutions that could improve this manual and duplicative process such as utilizing tablets to capture meter reads electronically that could be imported into the billing software or more specialized hand-held meter reading devices. These solutions would likely require a small capital cost to implement but elimination of the duplicative work would allow the MHI manager of operations' time to be applied to more value-added activities. Therefore, LGC should evaluate the costs associated with improving the efficiency of its meter reading process,

including the use of tablets for data entry, import and export of data between software applications, and/or modifications to LGC's CIMS.

2. PCLP has not documented customer service related policies and procedures.

Many customer service functions are provided to PCLP from O&R via the TSA. In preparation for its transition from O&R, PCLP hired two CSRs and a billing clerk who will assume the duties previously fulfilled by O&R. The CSRs and billing clerk are training on a test version of the CIMS to prepare for the new CIMS being implemented at PCLP. As a newly forming customer service organization, PCLP has not yet documented its own prescribed set of policies and procedures, and relies upon its tariff for guidance when performing any customer service related duties.

The tariff provides rate schedules, rules, regulations, and practices governing the distribution and sale of gas by a utility to its customers within a prescribed service territory. However, a tariff does not address all the utility's internal policies and procedures used in executing customer service functions or tasks. During our fieldwork, most PCLP customer service functions were provided by O&R, not directly by PCLP. The PUC's audit staff contends that proactively developing policies and procedures proactively can provide a basis for training new employees and ensure that performance of customer service activities is consistent.

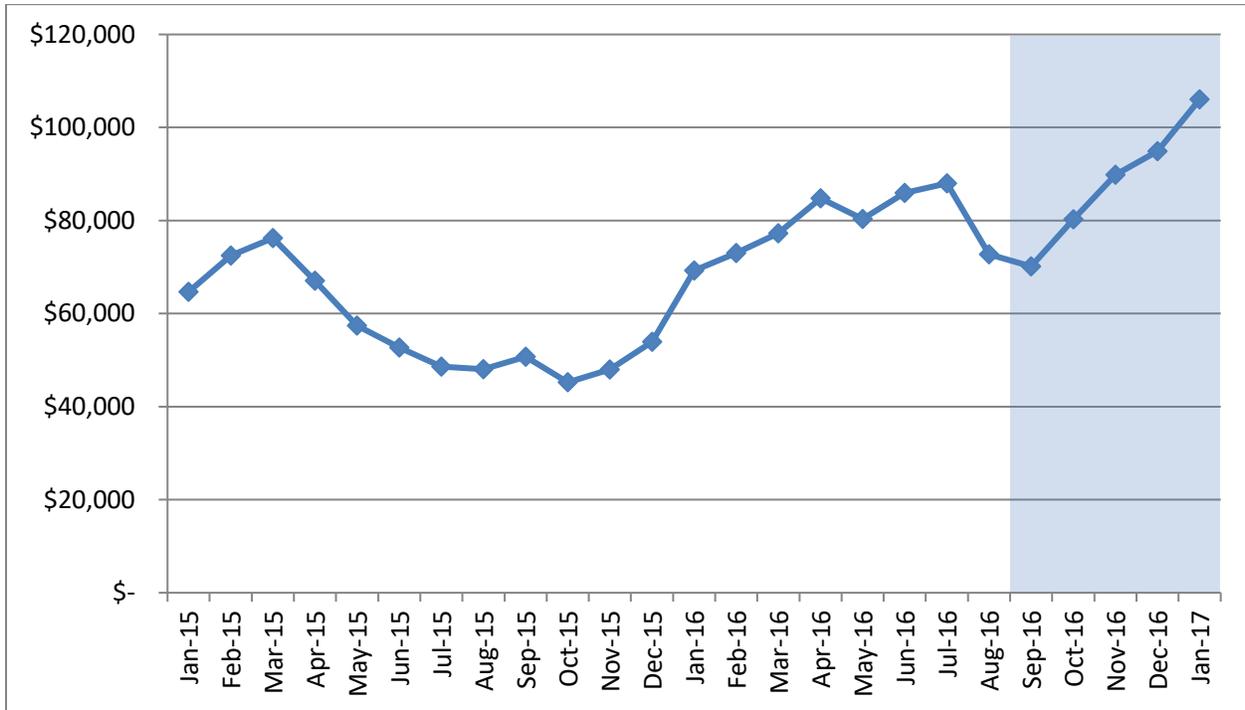
Customer service related activities are affected by Pennsylvania regulations. For example, 52 Pa. Code Chapter 56 prescribes specific requirements, including: billing and payment standards, credit and deposit standards, service interruptions and termination of service, customer disputes, complaints, and restoration of service. As such, policies and procedures should highlight specific Pennsylvania requirements help to ensure PCLP operates consistently with all applicable regulations. Customer service procedures also support operations with specific directives and guidance. For example, cash handling, opening and closing procedures, daily deposits, step-by-step instructions for the CIMS interface and other ancillary systems (supporting software, telephone, etc.) will provide a platform for continuing operations and helps to standardize performance of customer service activities. Therefore, as new hires train and PCLP gains experience with its new CIMS, it should document its core policies and procedures as soon as possible.

3. PCLP's long-term customer accounts receivable aging category has increased significantly since 2015.

As noted previously, PCLP continues to receive services from O&R, including customer services and collections, under the TSA. As shown in Exhibit X-1, PCLP's long-term customer accounts receivable aging category (180 days and over) has increased significantly since October 2016. PCLP has requested an explanation for the significant increases experienced in its long-term accounts receivable balances from

O&R; however, a response had not been received from O&R prior to conclusion of fieldwork.

Exhibit X-1
Pike County Light & Power Company
Customer Accounts Receivable Long-Term Aging (180 Days and Over) Category
Monthly Balances from January 2015 – January 2017



Note: Shading from September 2016 through January 2017 denotes ownership by CNGHC
Source: Company response to Data Request CS-3

PCLP’s 2016 termination levels reflect significant decreases from the levels in prior years. The PUC’s audit staff requested an update for O&R’s 2017 termination rates for PCLP. The update included partial year terminations through June 1, 2017 and reflected slightly decreased levels, though more consistent with PCLP’s prior year termination rates. Decreases in termination activity can point to improved collections; however, when experienced in tandem with significant increases in long-term outstanding accounts receivable, such decreases often indicate weaknesses in a company’s collections performance. Further, failure to terminate customers for non-payment allows for the continued accumulation of overdue balances and decreases the likelihood of payment. As such, a utility should strive to collect outstanding balances as soon as possible through various means.

It is noteworthy to mention that PCLP is not actively servicing its customers’ accounts due to the TSA with O&R and therefore cannot take ownership of its collection efforts including long-term account arrearages. Moreover, since CNGHC’s acquisition of PCLP, no bad debt write-offs have been recorded. As such, PCLP’s 2016 write-off

level was approximately \$55,000; which is significantly lower than its prior annual write-offs from 2013 through 2015 which ranged from \$80,000 to \$150,000. Between January 2013 and September 2016, under O&R's ownership, PCLP customer accounts receivable write-offs averaged approximately \$10,000 monthly. The PUC's audit staff notes that the suspension of PCLP's write-offs has contributed, in part, to the increases in PCLP's overall customer accounts receivable balances.

PCLP maintains approximately \$180,000 as bad debt allowance in reserves to mitigate increased risk of loss due to the temporary suspension of write-offs. Once PCLP has ownership of its collections processes, PCLP's CSRs will be primarily focused on collections after implementation of PCLP's CIMS. The PUC's audit staff believes that documentation of collection related policies and procedures, as recommended in Finding and Conclusion No. 2, will provide a foundation for the new staff to incorporate PCLP's customer handling procedures for overdue balances.

Written policies and procedures should provide for a variety of options for customers to allow the greatest opportunity for the collection of past due balances while allowing customers to maintain their utility service(s). Within other Pennsylvania utilities, increased customer communication often positively impacts outstanding balances, particularly with targeted customer care and increased customer accountability. A corporate strategy paired with programs like implementing a variety of payment arrangements (i.e., requirement of significant down payments (20% or greater) after a broken payment arrangement, extended repayment periods, etc.), leveraging PCLP's USP to assist low-income customers, etc. will provide more opportunities for customers to resolve overdue balances.

Recommendations

- 1. Automate the LGC meter reading process to eliminate manual and redundant data entry tasks to improve efficiencies.**
- 2. Document policies and procedures to govern customer service practices.**
- 3. Reduce long-term customer arrearages by implementing various collection methods including increased customer contact, review of customer repayment plans and terms, etc.**

XI. SETTLEMENT AGREEMENT

Background

On December 4, 2015, PCLP and O&R filed a joint petition with the Commission seeking approval to transfer ownership interests and control of PCLP to CNGHC. On August 11, 2016, the Commission approved a Settlement Agreement with the parties of record (Office of Consumer Advocate (OCA), Office of Small Business Advocate (OSBA), CNGHC, PCLP and O&R) without modification, allowing for CNGHC's acquisition of the stock of PCLP from O&R⁴³. On August 31, 2016, CNGHC closed on the sale of PCLP.

At the close of the sale, three transitional agreements went into effect between PCLP and O&R to facilitate a smooth transition and allow PCLP time to staff, acquire external resources, upgrade systems, transition key operating data, etc., as needed. The three transitional agreements in effect on the date of the sale were as follows:

- Transition Services Agreement – PCLP may procure all the services listed in the TSA Exhibit A (i.e., customer service and support operations, electric field services, gas field services, emergency response services, tech services, and electric SCADA and gas system monitoring services) for a term of 12 months, which may be extended on a month to month basis for an additional 6 months.
- Electric Supply Agreement – PCLP may continue to obtain electric supply and transportation from O&R for a 36-month period which may be extended for three 12-month periods.
- Gas Supply and Gas Transportation Agreement – PCLP may continue to obtain gas supply and transportation from O&R for a 36-month period, which may be extended for three 12-month periods.

In addition to approving the sale of PCLP to CNGHC, the Settlement Agreement also issued the necessary certificates of public convenience, registered PCLP's Securities Certificate, and approved an Affiliated Interest Agreement between PCLP, LGC, CNG, and MHI (see Chapter VI – Cost Allocations for additional information). The Joint Settlement Agreement submitted to the Commission for consideration and approval at Docket No. A-2015-2517036, etc. contained 16 stipulations to resolve competing positions of the parties. Exhibit XI-1 outlines the terms of the Settlement Agreement.

⁴³ Docket Nos.: A-2015-2517036, A-2015-2517111, G-2015-2517113, G-2015-2517114, S-2015-2517115, and S-2015-2517116

Exhibit XI-1 (Page 1 of 2)
Settlement Agreement Terms
As Approved by the Commission on August 11, 2016

1	PCLP shall commence a natural gas system cast iron and bare steel (CIBS) study within 6 months of closing, and within 18 months of closing start implementation of a replacement program.
2	Six months after closing, PCLP shall start a study of alternative supply options for its gas and electric divisions. For the electric division, the options studied shall include, but are not limited to, the inclusion of bilateral contracts as defined in 66 Pa.C.S. § 2803, which "may include the EEI Master Agreement for physical energy purchases and sales and the ISDA Master Agreement for financial energy purchases and sales." The study shall also include, but not be limited to, other flexible options such as purchases of financial (or physical) hedges in small quantities from brokers. PCLP shall consult with OCA and OSBA before the study begins with respect to its scope and the options to be studied. PCLP, OCA and OSBA shall meet to discuss the results of the study within 12 months of closing.
3	PCLP shall not file for a general rate increase under 1308(d) of the Public Utility Code, 66 Pa.C.S. § 1308(d) prior to a [sic] March 1, 2018. However, if a legislative body, the judiciary, or an administrative agency, including the Commission, enacts or orders any fundamental changes in policy or statutes that directly and substantially affect PCLP's cost of service, the Settlement shall not prevent PCLP from filing a tariff or tariff supplement to the extent necessitated by such action. In addition, this provision shall not preclude PCLP from seeking extraordinary rate relief under Section 1308(e) of the Public Utility Code, 66 Pa.C.S. § 1308(e).
4	PCLP will hold no fewer than four quarterly meetings during the three years following the date of closing with local officials, economic development councils and/or agencies, to discuss any need for expansion of service or any service issues.
5	PCLP and O&R will modify the Transition Services Agreement (TSA) to allow PCLP to extend the 12-month term of the TSA, on a month to month basis, for a maximum of an additional 6 months. During the term of the Transitional Service Agreement, PCLP will meet or have a quarterly conference with OCA and OSBA to (a) explain in sufficient detail what services PCLP is continuing to take under the TSA and what services it no longer requires and (b) to provide sufficient detail of what substitute services from the CNGHC or other vendors has or will occur. OCA and OSBA shall keep such information confidential during the term of the Transitional Service Agreement.
6	O&R and CNGHC agree that the TSA is intended to provide PCLP/CNGHC with the ability to procure all of the services listed in TSA Exhibit A during the full term of the agreement. O&R and CNGHC further agree that the TSA "Hours Limitation" provision will not be applicable to emergency or extraordinary circumstances.
7	CNGHC shall provide monthly updates to OCA and OSBA of its General Manager hiring initiative until the General Manager is hired. OCA and OSBA shall keep confidential the identity of, and any information which could identify, candidates who request that their interest in the position be kept confidential.
8	CNGHC fully acknowledges its responsibility to promptly implement a staffing plan for PCLP after closing that will provide safe, reliable, and responsive gas and electric utility service at reasonable cost to PCLP customers. To that end, PCLP/CNGHC's staffing plan will include approximately 12 full time equivalent employees (FTEs) of PCLP. PCLP will hire, by no later than 3 months after closing, as PCLP employees the following 5 full time positions: 2 gas fitter/meter readers, 1 general manager, 1 customer service manager/public affairs manager, and 1 customer service representative. If additional time is required to secure qualified persons for these five positions, PCLP/CNGHC may take up to nine additional months (for a total of one year from closing) to fill these positions, provided it shows cause for doing so and has exercised its best cost-effective and expeditious efforts to obtain qualified personnel. For the remaining positions in the areas of billing, IT, accounting, and HR/insurance, within 18 months of closing, these positions will be filled, or service provided, by hired PCLP employees, CNGHC employees, contractors or a combination thereof. For the areas of electric crew persons, electric engineering support, and supply analyst/procurement, PCLP will staff these positions within 18 months with PCLP or CNGHC employees unless PCLP demonstrates that staffing some or all of these positions through contractor employees is cost-effective and fulfills PCLP's obligation to provide service in accordance with the requirements of the Public Utility Code. If PCLP determines to use contractors for any of the above positions, it shall provide its demonstration to the Commission for review and approval, which shall occur within 10 days of filing. This review and approval requirement shall expire 18 months after the date of closing.

Exhibit XI-1 (Page 2 of 2)
Settlement Agreement Terms
As Approved by the Commission on August 11, 2016

9	PCLP/CNGHC shall provide OCA, OSBA, and the Commission with sufficiently detailed quarterly status reports on the progress of retaining an electric and gas utility staff for PCLP. Each report shall contain information regarding the number of permanent staff retained and the number of contractors still in use.
10	PCLP will continue its Electric Division Reliability Plan.
11	Transaction costs and costs incurred as a result of this acquisition will not be claimed by PCLP in any rate case. Such costs shall include the costs incurred to effect and gain regulatory approvals for the purchase of PCLP, the costs of recruiting a new staff, the cost of training a new staff, the costs of bringing PCLP into compliance with PUC regulations due to the change in ownership, except to the extent PCLP can demonstrate that such costs result in cost savings for PCLP customers.
12	No goodwill or acquisition premium, if any, will be claimed by PCLP in any rate case (including goodwill-related equity in capital structure).
13	For the next general gas and electric rate cases, PCLP shall not request inclusion of risk premium in the authorized return on equity for small size or for any other aspect of parent company (CNGHC) risk attributes. While this provision does not prohibit PCLP from requesting such a risk premium in future rate cases beyond the first post-Closing cases, all parties retain all rights to oppose such a request for a risk premium.
14	PCLP customers shall be held harmless from adverse rate effects associated with tax and accounting changes associated with this transaction. This would include but not be limited to the loss of the PCLP balance of accumulated deferred taxes to the extent they are includable in rate base as a deduction. PCLP would have the burden of demonstrating an absence of harm from the loss of PCLP's pre-Closing deferred tax balance at the time of its next rate case to the extent they are includable in rate base as a deduction.
15	PCLP/CNGHC shall study the feasibility and cost implications of an interest rate swap, or similar switch to fixed rate debt, to hedge variable rate debt and shall provide its findings in one of its quarterly status reports filed within six months after closing of the transaction.
16	PCLP shall establish a service center/office in PCLP's service territory.

Source: Joint Petition for Full Settlement

Findings and Conclusions

Our examination of the Settlement Agreement focused on a selection of the terms summarized above and the progress made by PCLP in fulfilling the terms of the Settlement Agreement in areas highlighted below and throughout this report. Due to timing of the Settlement Agreement and audit fieldwork, several terms were not reviewed by the PUC's audit staff. Based on our review, PCLP should initiate or devote additional efforts to fulfilling the terms of the Settlement Agreement by addressing the following:

1. PCLP has made progress in fulfilling certain time sensitive Settlement Agreement stipulations but additional work is needed to complete them.

As shown in Exhibit XI-1, PCLP as part of the Settlement Agreement is required to fulfill certain stipulations within designated timeframes. Exhibit XI-2 provides a summary of PCLP's progress in meeting those time sensitive stipulations as of July 2017. For all these items, PCLP still has time to complete them per the Settlement Agreement but additional work was still needed at the close of field work.

Exhibit XI-2
Abbreviated Settlement Agreement Terms
As Approved by the Commission on August 11, 2016
Performance as of July 12, 2017

Select Settlement Stipulations		PCLP Performance
1.	Cast iron and bare steel (CIBS) study.	Notice was provided in PCLP’s February 28, 2017 quarterly status report that it commenced a CIBS study. The study remains in progress as of July 12, 2017.
8.	CNGHC responsibility to promptly implement a staffing plan to include approximately 12 full time equivalent employees (FTEs) of PCLP.	As discussed within Chapter III – Organizational Structure and Staffing PCLP has filled six positions; however, these positions do not include any gas fitter/meter reader personnel. See Finding and Conclusion No. III-2 in Chapter III – Organizational Structure for more information about PCLP’s plans for staffing.
15.	PCLP/CNGHC shall study the feasibility and cost implications of an interest rate swap, or similar switch to fixed rate debt.	PCLP included its feasibility study results as part of the February 28, 2017 status report which met its time sensitive obligation. PCLP met with its lender on May 31, 2017 to negotiate terms and planned to update the PUC on its position and strategy at its August 31, 2017 quarterly status report.

Note: See Exhibit XI-1 for full details of the Settlement Stipulations summarized within this exhibit.
Source: Joint Petition for Full Settlement, PUC filed quarterly status reports, Data Requests and Interviews.

Recommendations

- 1. Continue efforts to ensure compliance with time sensitive stipulations of the Settlement Agreement.**

XII. ACKNOWLEDGEMENTS

We wish to express our appreciation for the cooperation and assistance given to us during the Focused Management and Operations Audit by the officers and staff of Leatherstocking Gas Company LLC and Pike County Light & Power Company.

This audit was conducted by Krystle Daugherty, Porus Irani, Deron Henry, Jennie Banzhof, Barry Keener, and Michael Flynn of the Management Audit Staff of the Bureau of Audits.

XIII. APPENDICES

- Appendix A Pike County Power & Light Company (Electric Division) Financial and Operating Data and Statistics
- Appendix B Pike County Power & Light Company (Electric Division) Balance Sheet
- Appendix C Pike County Power & Light Company (Gas Division) Financial and Operating Data and Statistics
- Appendix D Leatherstocking Gas Company LLC Financial and Operating Data and Statistics

**Pike County Power and Light (Electric Division)
Financial and Operating Data and Statistics**

	2012	2013	2014	2015	Compound Growth
<u>Operating Revenues</u>					
Sales of Electricity					
Residential Sales	\$2,416,731	\$2,957,961	\$3,655,079	\$3,928,612	17.6%
Commercial Sales	\$2,234,119	\$2,802,374	\$3,602,048	\$3,471,622	15.8%
Industrial Sales	\$883,700	\$1,035,481	\$1,220,019	\$1,057,264	6.2%
Public Street and Highway Lighting Sales	\$56,741	\$64,858	\$72,364	\$83,196	13.6%
Total Sales to Ultimate Customers	\$5,591,291	\$6,860,674	\$8,549,510	\$8,540,694	15.2%
Sales for Resale	\$0	\$0	\$0	\$0	0.0%
Total Sales of Electricity	\$5,591,291	\$6,860,674	\$8,549,510	\$8,540,694	15.2%
Provision for Rate Refunds	\$0	\$0	\$0	\$0	0.0%
Total Revenues Net Provisions	\$5,591,291	\$6,860,674	\$8,549,510	\$8,540,694	15.2%
<u>Megawatt Hours Sold</u>					
Sales of Electricity					
Residential Sales	29,849	30,534	30,464	30,295	0.5%
Commercial Sales	44,961	30,666	31,668	33,106	-9.7%
Industrial Sales	-	13,274	13,065	13,279	NM
Public Street and Highway Lighting Sales	224	223	214	215	-1.4%
Total Sales to Ultimate Customers	75,034	74,697	75,411	76,895	0.8%
Sales for Resale	-	-	-	-	0.0%
Total Sales of Electricity	75,034	74,697	75,411	76,895	0.8%
<u>Average Number of Customers Per Month</u>					
Sales of Electricity					
Residential Sales	3,660	3,660	3,667	3,677	0.2%
Commercial Sales	999	993	991	1,007	0.3%
Industrial Sales	-	7	12	7	NM
Public Street and Highway Lighting Sales	8	6	7	9	4.0%
Total Sales to Ultimate Customers	4,667	4,666	4,677	4,700	0.2%
Sales for Resale	-	-	-	-	0.0%
Total Sales of Electricity	4,667	4,666	4,677	4,700	0.2%
<u>Operation and Maintenance Expenses</u>					
<u>Transmission</u>					
Total Operation	\$10,383	\$6,231	\$87,994	\$44,155	62.0%
Maintenance Supervision and Engineering	\$0	\$0	\$0	\$0	0.0%
Maintenance of Structures	\$0	\$0	\$0	\$0	0.0%
Maintenance of Station Equipment	\$0	\$0	\$0	\$0	0.0%
Maintenance of Overhead Lines	\$0	\$966	\$156	\$0	0.0%
Maintenance of Underground Lines	\$0	\$0	\$0	\$0	0.0%
Maintenance of Misc. Transmission Plant	\$0	\$0	\$0	\$0	0.0%
Total Maintenance	\$0	\$966	\$156	\$0	0.0%
Total Transmission O&M Expenses	\$10,383	\$7,197	\$88,150	\$44,155	62.0%

2016 data incomplete due to the acquisition of Pike

NM - Not Meaningful

Source: Pa PUC Annual Reports

**Pike County Power and Light (Electric Division)
Financial and Operating Data and Statistics**

	2012	2013	2014	2015	Compound Growth
<u>Distribution</u>					
Operation Supervision/Engineering	\$238,638	\$309,267	\$138,621	\$74,032	-32.3%
Load Dispatching	\$17,454	\$0	\$0	\$0	-100.0%
Station Expenses	\$29,861	\$3,535	\$7,580	\$5,495	-43.1%
Overhead Line Expenses	\$19,705	\$72,215	\$103,724	\$70,024	52.6%
Underground Line Expenses	\$921	\$11,786	\$10,825	\$22,134	188.6%
Street Lighting and Signal System Expenses	\$0	\$0	\$0	\$0	0.0%
Meter Expenses	\$49,682	\$73,739	\$42,544	\$38,008	-8.5%
Customer Installations Expenses	\$2,953	\$1,810	\$356	\$1,185	-26.2%
Miscellaneous Distribution Expenses	\$156,506	\$199,593	\$254,599	\$224,492	12.8%
Rents	\$186	\$0	\$50	\$0	-100.0%
Total Operation	\$515,906	\$671,945	\$558,299	\$435,370	-5.5%
Maintenance Supervision/Engineering	\$0	\$0	\$0	\$0	0.0%
Maintenance of Structures	\$0	\$0	\$0	\$0	0.0%
Maintenance of Station Equipment	\$18,239	\$1,705	\$3,248	\$16,143	-4.0%
Maintenance of Overhead Lines	\$551,658	\$726,026	\$652,539	\$676,230	7.0%
Maintenance of Underground Lines	\$7,899	\$26,012	\$47,306	\$43,588	76.7%
Maintenance of Line Transformers	\$0	\$0	\$0	\$0	0.0%
Maintenance of Street Lighting/Signal Systems	\$13,098	\$23,510	\$15,507	\$17,226	9.6%
Maintenance of Meters	\$1,165	\$0	\$0	\$0	-100.0%
Maintenance of Misc. Distribution Plant	\$2,240	\$1,995	\$0	\$0	-100.0%
Total Maintenance	\$594,299	\$779,248	\$718,600	\$753,187	8.2%
Total Distribution O&M Expenses	\$1,110,205	\$1,451,193	\$1,276,899	\$1,188,557	2.3%
Total Transmission and Distribution Expenses	\$1,120,588	\$1,458,390	\$1,365,049	\$1,232,712	3.2%
<u>Customer Service and Info. Expenses</u>					
Supervision	\$0	\$0	\$0	\$0	0.0%
Customer Assistance Expenses	\$0	\$0	\$0	\$0	0.0%
Information and Instructional Expenses	\$30,132	\$17,397	\$10,419	\$5,331	-43.9%
Misc Customer Service and Info. Expenses	(\$30,227)	\$15,628	\$14,100	\$11,357	-172.2%
Total Customer Service and Info. Expenses	(\$95)	\$33,025	\$24,519	\$16,688	-660.1%
<u>UTILITY OPERATING INCOME</u>					
OPERATING REVENUES	\$5,664,418	\$6,979,151	\$9,428,842	\$9,009,078	16.7%
OPERATING EXPENSES					
Operation Expenses	\$3,794,763	\$5,053,126	\$6,779,437	\$5,478,832	13.0%
Maintenance Expenses	\$598,856	\$790,732	\$729,338	\$763,572	8.4%
Depreciation Expenses	\$428,779	\$436,080	\$558,514	\$583,478	10.8%
Amort. and Depreciation of Utility Plant	\$0	\$0	\$0	\$0	0.0%
Amortortization of Utility Plant Acquired	\$16,931	\$18,226	\$0	\$0	-100.0%
Regulatory Debits	\$0	\$0	\$0	\$0	0.0%
Regulatory Credits	\$0	\$0	\$0	\$0	0.0%
Taxes Other Than Income Taxes	\$407,015	\$465,085	\$559,791	\$562,886	11.4%
Federal Income Taxes	(\$435,284)	(\$475,505)	(\$588,499)	\$759,497	-220.4%
Provision for Deferred Income Taxes	\$832,842	\$1,422,543	\$1,598,705	\$892,058	2.3%
Provision for Deferred Income Taxes - Credit	(\$515,573)	(\$1,157,012)	(\$950,442)	(\$1,158,883)	31.0%
Investment Tax Credit	(\$4,222)	(\$1,282)	(\$1,175)	(\$1,157)	-35.0%
Gains from Disposition of Utility Plant	\$0	\$0	\$0	\$0	0.0%
Losses from Disposition of Utility Plant	\$0	\$0	\$0	\$0	0.0%
Gains from Disposition of Allowances	\$0	\$0	\$0	\$0	0.0%
Losses from Disposition of Allowances	\$0	\$0	\$0	\$0	0.0%
TOTAL UTILITY OPERATING EXPENSES	\$5,124,107	\$6,551,993	\$8,685,669	\$7,880,283	15.4%
NET UTILITY OPERATING INCOME	\$540,311	\$427,158	\$743,173	\$1,128,795	27.8%

2016 data incomplete due to the acquisition of Pike

NM - Not Meaningful

Source: Pa PUC Annual Reports

**Pike County Power and Light (Electric Division)
Financial and Operating Data and Statistics**

	2012	2013	2014	2015	Compound Growth
OTHER INCOME AND DEDUCTIONS					
Rev. from merch., Jobbing and Cont. Work	\$0	\$0	\$0	\$0	0.0%
Costs & Exp. Of Merch., Jobbing & Contract	\$0	\$0	\$0	\$0	0.0%
Revenue from Non-Utility Operations	\$0	\$0	\$0	\$0	0.0%
Expenses of Non-Utility Operations	\$0	\$0	\$0	\$0	0.0%
Non Operating Rental Income	\$0	\$0	\$0	\$0	0.0%
Equity in Earnings of Subsidiary Companies	\$0	\$0	\$0	\$0	0.0%
Interest & Dividend Income	\$4,202	\$3,160	\$1,154	\$1,801	-24.6%
Allow. for Other Funds Used During Constructio	\$10,234	\$6,543	\$6,292	\$0	-100.0%
Miscellaneous Non Operating Income	\$0	\$0	\$0	\$0	0.0%
Gain on Disposition of Property	\$0	\$0	\$0	\$0	0.0%
TOTAL OTHER INCOME	\$ 14,436	\$ 9,703	\$ 7,446	\$ 1,801	-50.0%
Loss on Disposition of Property	\$0	\$0	\$0	\$0	0.0%
Miscellaneous Amortization	\$0	\$0	\$0	\$0	0.0%
Donations	\$0	\$0	\$19,949	\$11,178	NM
Life Insurance	\$0	\$0	(\$28)	\$0	0.0%
Penalties	\$0	\$0	\$0	\$0	0.0%
Miscellaneous Income Deductions	\$24,798	\$17,798	\$3,192	\$4,117	-45.0%
TOTAL OTHER INCOME DEDUCTIONS	\$ 24,798	\$ 17,798	\$ 23,113	\$ 15,295	-14.9%
Taxes Other Than Income Taxes	\$0	\$0	\$0	\$0	0.0%
Income Taxes, Other Income and Deductions	(\$56)	(\$30,133)	(\$23,748)	(\$10,317)	469.0%
Other Income Taxes	\$0	\$0	\$0	\$0	0.0%
Provision for Deferred Income Taxes	\$6,284	\$16,303	\$10,680	\$2,123	-30.4%
Deferred Income Tax Credits	(\$22,469)	(\$4,309)	(\$4,210)	(\$6,022)	-35.5%
Investment Tax Credit Adjustment - Net	\$0	\$0	\$0	\$0	0.0%
Investment Tax Credit	\$0	\$0	\$0	\$0	0.0%
TOT. TAXES ON OTHER INC. AND DED.	(\$16,241)	(\$18,139)	(\$17,278)	(\$14,216)	-4.3%
NET OTHER INCOME AND DEDUCTIONS	\$ 5,879	\$ 10,044	\$ 1,611	\$ 722	-50.3%
INTEREST CHARGES					
Interest on Long-Term Debt	\$200,222	\$201,354	\$199,985	\$200,018	0.0%
Amortization of Debt Disc. And Expense	\$11,876	\$11,887	\$11,852	\$11,853	-0.1%
Amortization of Loss on Reacquired Debt	\$0	\$0	\$0	\$0	0.0%
Amortization of Premium on Debt	\$0	\$0	\$0	\$0	0.0%
Amort. of Gain on Reacquired Debit-Credit	\$0	\$0	\$0	\$0	0.0%
Interest on Debt to Associated Companies	\$241,828	\$321,249	\$308,932	\$335,734	11.6%
Other Interest Expense	\$5,371	\$12,428	\$6,323	\$7,352	11.0%
Allow. for Borrowed Funds Used During Constru	(\$6,003)	(\$3,508)	(\$3,783)	(\$494)	-56.5%
NET INTEREST CHARGES	\$453,294	\$543,410	\$523,309	\$554,463	6.9%
INCOME BEFORE EXTRAORDINARY ITEMS	\$92,896	(\$106,208)	\$221,475	\$575,054	83.6%
EXTRAORDINARY ITEMS					
Extraordinary Income	\$0	\$0	\$0	\$0	0.0%
Extraordinary Deductions	\$0	\$0	\$0	\$0	0.0%
Income Taxes - Extraordinary Items	\$0	\$0	\$0	\$0	0.0%
TOTAL EXTRAORDINARY ITEMS	\$0	\$0	\$0	\$0	0.0%
NET INCOME	\$92,896	(\$106,208)	\$221,475	\$575,054	83.6%

2016 data incomplete due to the acquisition of Pike

NM - Not Meaningful

Source: Pa PUC Annual Reports

**Pike County Power and Light (Electric Division)
Balance Sheet**

BALANCE SHEET	2012	2013	2014	2015	Compound Growth
UTILITY PLANT					
Utility Plant	\$20,835,409	\$22,282,936	\$23,649,356	\$24,558,750	5.6%
Construction Work in Progress	\$851,823	\$460,211	\$61,886	\$315,465	-28.2%
TOTAL UTILITY PLANT	\$21,687,232	\$22,743,147	\$23,711,242	\$24,874,215	4.7%
Accum. Depreciation and Amortization	(\$4,845,319)	(\$5,229,662)	(\$5,630,052)	(\$5,990,040)	7.3%
NET UTILITY PLANT	\$16,841,913	\$17,513,485	\$18,081,190	\$18,884,175	3.9%
CURRENT AND ACCRUED ASSETS					
Cash	\$92,281	\$316,928	\$1,416,701	\$1,199,638	135.1%
Special Deposits	\$0	\$0	\$0	\$0	0.0%
Working Fund	\$79	\$0	\$0	\$0	-100.0%
Temporary Cash Investments	\$3,000,000	\$2,275,000	\$900,000	\$3,100,000	1.1%
Notes Receivable	\$0	\$0	\$0	\$0	0.0%
Customer Accounts Receivable	\$469,200	\$480,249	\$697,575	\$553,133	5.6%
Other Accounts Receivable	\$10,958	\$895	\$15,052	\$38,632	52.2%
Accum. for Uncollectible Accounts	(\$86,650)	(\$87,742)	(\$143,362)	(\$153,353)	21.0%
Notes Receivable from Assoc. Companies	\$0	\$0	\$0	\$0	0.0%
Accts Receivable from Assoc. Companies	\$233,107	\$393,348	\$1,243,206	\$187,226	-7.0%
Fuel Stock	\$0	\$0	\$0	\$0	0.0%
Fuel Stock Expenses Undistributed	\$0	\$0	\$0	\$0	0.0%
Residuals and Extracted Products	\$0	\$0	\$0	\$0	0.0%
Plant Materials and Operating Supplies	\$216,695	\$214,160	\$235,383	\$223,636	1.1%
Merchandise	\$0	\$0	\$0	\$0	0.0%
Other Materials and Supplies	\$0	\$0	\$0	\$0	0.0%
Nuclear Materials Held for Sales	\$0	\$0	\$0	\$0	0.0%
Allowances	\$0	\$0	\$0	\$0	0.0%
Noncurrent Portion of Allowances	\$0	\$0	\$0	\$0	0.0%
Stores Expense Undistributed	\$0	\$0	\$0	\$0	0.0%
Gas Stored Underground-Current	\$0	\$0	\$0	\$0	0.0%
Liquefied Gas Stored and Held for Proc.	\$0	\$0	\$0	\$0	0.0%
Prepayments	\$131,588	\$109,775	\$88,499	\$49,634	-27.7%
Interest and Dividends Receivable	\$0	\$0	\$0	\$0	0.0%
Rents Receivable	\$0	\$0	\$0	\$0	0.0%
Accrued Utility Revenues	\$716,630	\$621,424	\$789,334	\$692,587	-1.1%
Miscellaneous Current and Accrued Assets	\$0	\$0	\$0	\$0	0.0%
TOTALS	\$4,783,888	\$4,324,037	\$5,242,388	\$5,891,133	7.2%
DEFERRED DEBITS					
Unamortized Debt Expenses	\$32,434	\$26,796	\$21,158	\$15,520	-21.8%
Extraordinary Property Losses	\$0	\$0	\$0	\$0	0.0%
Unrecovered Plant and Regulatory Study	\$0	\$0	\$0	\$0	0.0%
Other Regulatory Assets	\$3,427,018	\$3,820,339	\$4,598,085	\$3,898,607	4.4%
Prelim. Survey and Investigation Charges	\$0	\$0	\$0	\$0	0.0%
Clearing Accounts	\$0	\$0	\$0	\$0	0.0%
Temporary Facilities	\$0	\$0	\$0	\$0	0.0%
Misc. Deferred Debits	\$179,809	\$187,987	\$105,600	\$181,484	0.3%
Def. Losses from Disposition of Plant	\$0	\$0	\$0	\$0	0.0%
Research, Devel. and Demonstration	\$0	\$0	\$0	\$0	0.0%
Unamortized Loss on Reacquired Debt	\$45,214	\$37,463	\$29,712	\$21,961	-21.4%
Accum. Deferred Income Taxes	\$1,459,672	\$1,296,937	\$893,626	\$1,404,773	-1.3%
TOTALS	\$5,144,147	\$5,369,522	\$5,648,181	\$5,522,345	2.4%
TOTAL ASSETS AND OTHER DEBITS	\$26,769,948	\$27,207,044	\$28,971,759	\$30,297,653	4.2%

2016 data incomplete due to the acquisition of Pike

NM - Not Meaningful

Source: Pa PUC Annual Reports

**Pike County Power and Light (Electric Division)
Balance Sheet**

BALANCE SHEET	2012	2013	2014	2015	Compound Growth
<u>PROPRIETARY CAPITAL</u>					
Common Stock Issued	\$137,000	\$137,000	\$137,000	\$137,000	0.0%
Preferred Stock Issued	\$0	\$0	\$0	\$0	0.0%
Capital Stock Subscribed	\$0	\$0	\$0	\$0	0.0%
Stock Liability for Conversion	\$0	\$0	\$0	\$0	0.0%
Premium on Capital Stock	\$0	\$0	\$0	\$0	0.0%
Other Paid-in Capital Stock	\$500,000	\$500,000	\$500,000	\$500,000	0.0%
Installments Received on Capital Stock	\$0	\$0	\$0	\$0	0.0%
Discount on Capital Stock	\$0	\$0	\$0	\$0	0.0%
Capital Stock Expense	\$0	\$0	\$0	\$0	0.0%
Retained Earnings	\$4,713,111	\$4,499,448	\$4,579,663	\$5,140,270	2.9%
Unappropriated Undistributed Earnings	\$0	\$0	\$0	\$0	0.0%
Reacquired Capital Stock	\$0	\$0	\$0	\$0	0.0%
Other	\$0	\$0	\$0	\$0	0.0%
TOTALS	\$5,350,111	\$5,136,448	\$5,216,663	\$5,777,270	2.6%
<u>LONG-TERM DEBT</u>					
Bonds	\$3,200,000	\$3,200,000	\$3,200,000	\$3,200,000	0.0%
Reacquired Bonds	\$0	\$0	\$0	\$0	0.0%
Advances from Associated Companies	\$0	\$0	\$0	\$0	0.0%
Other Long-Term Debt	\$0	\$0	\$0	\$0	0.0%
Unamortized Premium on Long-Term Debt	\$0	\$0	\$0	\$0	0.0%
Unamortized Discount on Long-Term Debt	\$0	\$0	\$0	\$0	0.0%
TOTALS	\$3,200,000	\$3,200,000	\$3,200,000	\$3,200,000	0.0%
<u>OTHER NONCURRENT LIABILITIES</u>					
Obligations Under Capital Leases-Noncurrent	\$0	\$0	\$0	\$0	0.0%
Accum. Provision for Property Insurance	\$0	\$0	\$0	\$0	0.0%
Accum. Provision for Injuries and Damages	\$0	\$0	\$0	\$0	0.0%
Accum. Provision for Pensions and Benefits	\$93,356	\$0	\$0	\$0	-100.0%
Accum. Misc. Operating Provisions	\$0	\$0	\$0	\$0	0.0%
Accum. Provision for Rate Refunds	\$7,000	\$1,400	\$0	\$0	-100.0%
TOTALS	\$100,356	\$1,400	\$0	\$0	-100.0%
<u>CURRENT AND ACCRUED LIABILITIES</u>					
Notes Payable	\$0	\$0	\$0	\$0	0.0%
Accounts Payable	\$1,140,279	\$345,502	\$520,858	\$279,673	-37.4%
Notes Payable to Associated Companies	\$0	\$0	\$0	\$0	0.0%
Account Payable to Associated Companies	\$10,137,896	\$11,503,014	\$10,942,253	\$12,325,284	6.7%
Customer Deposits	\$106,372	\$82,949	\$149,160	\$158,478	14.2%
Taxes Accrued	\$31,519	\$79,579	\$182,362	\$116,308	54.5%
Interest Accrued	\$48,066	\$51,182	\$59,308	\$58,009	6.5%
Dividends Declared	\$0	\$0	\$0	\$0	0.0%
Matured Long-Term Debt	\$0	\$0	\$0	\$0	0.0%
Matured Interests	\$0	\$0	\$0	\$0	0.0%
Tax Collections Payable	\$0	\$0	\$0	\$0	0.0%
Misc. Current and Accrued Liabilities	\$95,000	\$72,790	\$71,767	\$202,148	28.6%
Obligations Under Capital Leases-Current	\$0	\$0	\$0	\$0	0.0%
TOTALS	\$11,559,132	\$12,135,016	\$11,925,708	\$13,139,900	4.4%
<u>DEFERRED CREDITS</u>					
Customer Advances for Construction	\$0	(\$2,549)	\$0	\$0	0.0%
Other Deferred Credits	\$538,707	\$29,452	\$655,538	\$213,505	-26.5%
Other Regulatory Liabilities	\$384,401	\$393,537	\$1,344,217	\$1,207,099	46.4%
Accum. Deferred Investments Tax Credits	\$14,260	\$12,853	\$11,523	\$10,218	-10.5%
Unamortized Gain on Reacquired Debt	\$0	\$0	\$0	\$0	0.0%
Accum. Deferred Income Taxes - Other Property	\$4,348,335	\$4,699,667	\$5,366,922	\$5,547,053	8.5%
Accum. Deferred Income Taxes - Other	\$1,274,646	\$1,601,220	\$1,251,188	\$1,202,608	-1.9%
TOTALS	\$6,560,349	\$6,734,180	\$8,629,388	\$8,180,483	7.6%
TOTAL LIABILITIES AND OTHER CREDITS	\$26,769,948	\$27,207,044	\$28,971,759	\$30,297,653	4.2%

2016 data incomplete due to the acquisition of Pike

NM - Not Meaningful

Source: Pa PUC Annual Reports

**Pike County Light Power
Financial and Operating Data and Statistics**

<u>Operating Statistics</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Compound Growth</u>
Gross Utility Plant	\$21,687,232	\$22,743,147	\$23,711,242	\$24,874,215	4.7%
Depreciation & Amortization	4,845,319	5,229,662	5,630,052	5,990,040	7.3%
Net Utility Plant	<u>\$16,841,913</u>	<u>\$17,513,485</u>	<u>\$18,081,190</u>	<u>\$18,884,175</u>	3.9%
Operating Revenue:					
Residential	\$988,405	\$997,522	\$1,260,345	\$1,126,810	4.5%
Commercial	210,458	240,185	332,855	293,289	11.7%
Industrial	0	0	0	0	0.0%
Subtotals	<u>\$1,198,863</u>	<u>\$1,237,707</u>	<u>\$1,593,200</u>	<u>\$1,420,099</u>	5.8%
Other	-1,973	5,512	5,874	5,033	-236.6%
Totals	<u>\$1,196,890</u>	<u>\$1,243,219</u>	<u>\$1,599,074</u>	<u>\$1,425,132</u>	6.0%
Deliveries by Volume (Mcf)					
Residential	94,840	107,132	113,038	101,311	2.2%
Commercial	21,803	28,439	33,050	31,657	13.2%
Industrial	0	0	0	0	0.0%
Total Mcf Sales	<u>116,643</u>	<u>135,571</u>	<u>146,088</u>	<u>132,968</u>	4.5%
Total Receipts (Mcf)	110,840	131,426	141,447	130,095	5.5%
Unaccounted for Gas (Mcf)	-810	-558	-3,883	-15,080	165.0%
UFG as a % of Total Receipts	-0.73%	-0.42%	-2.75%	-11.59%	151.3%
Customers (Average):					
Residential	1,104	1,108	1,110	1,120	0.5%
Commercial	88	89	87	87	-0.4%
Industrial	0	0	0	0	0.0%
Other	0	0	0	0	0.0%
Totals	<u>1,192</u>	<u>1,197</u>	<u>1,197</u>	<u>1,207</u>	0.4%
Employees (Average)	0	0	0	0	0.0%
Distribution Mains (M. Ft.)	87,522	90,887	91,267	91,273	1.4%
Transmission Mains (M. Ft.)	0	0	0	0	0.0%
Total Main Pipeline (M. Ft.)	<u>87,522</u>	<u>90,887</u>	<u>91,267</u>	<u>91,273</u>	1.4%
Total Main Pipeline (Miles)	16,576	17,213	17,285	17,287	1.4%
Services	1,395	1,397	1,410	1,425	0.7%

2016 data incomplete due to the acquisition of Pike

NM = Not Meaningful

NA = Not available

**Pike County Light Power
Financial and Operating Data and Statistics**

<u>Gas Operation & Maintenance Expenses</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Compound Growth</u>
	\$	\$	\$	\$	
Natural Gas Production Expenses	0	0	0	0	0.0%
Other Gas Supply Expenses	694,720	675,034	925,490	721,387	1.3%
Natural Gas Storage, Terminating, & Processing Expenses:					
Underground Storage Expenses	0	0	0	0	NM
Maintenance	0	0	0	0	NM
Total	0	0	0	0	NM
Transmission Expenses:					
Operation	0	0	0	0	NM
Maintenance	0	0	0	0	NM
Totals	0	0	0	0	NM
Distribution Expenses:					
Operation	94,277	132,272	337,556	220,592	32.8%
Maintenance	96,271	73,143	126,799	77,544	-7.0%
Totals	190,548	205,415	464,355	298,136	16.1%
Customer Accounts Expenses	41,779	59,829	61,018	62,749	14.5%
Customer Service & Inform. Expenses	5,874	25,529	17,733	5,656	-1.3%
Sales Expenses	2	2	25	3	14.5%
Administrative & General Expenses:					
Operation	130,258	217,166	190,041	191,002	13.6%
Maintenance	459	1,523	1,554	1,446	46.6%
Totals	130,717	218,689	191,595	192,448	13.8%
Total Gas Operation & Maintenance Exp.	1,063,640	1,184,498	1,660,216	1,280,379	6.4%

2016 data incomplete due to the acquisition of Pike

NM - Not Meaningful

Source: PUC Annual Reports

Leatherstocking Gas Company
Financial and Operating Data and Statistics

Appendix D
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<u>Operating Statistics</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Compound Growth</u>
Gross Utility Plant	\$253,447	\$3,486,212	\$7,093,368	\$11,137,956	\$11,812,839	NM
Depreciation & Amortization	0	43,195	171,099	458,407	824,817	NM
Net Utility Plant	<u>\$253,447</u>	<u>\$3,443,017</u>	<u>\$6,922,269</u>	<u>\$10,679,549</u>	<u>\$10,988,022</u>	NM
Operating Revenue:						
Residential	\$0	\$655	\$48,253	\$183,375	\$266,131	NM
Commercial	0	49,076	274,519	546,032	574,441	NM
Industrial	0	0	0	0	126,112	NM
Subtotals	<u>\$0</u>	<u>\$49,731</u>	<u>\$322,772</u>	<u>\$729,407</u>	<u>\$966,684</u>	NM
Other	0	0	0	0	0	NM
Totals	<u>\$0</u>	<u>\$49,731</u>	<u>\$322,772</u>	<u>\$729,407</u>	<u>\$966,684</u>	NM
Deliveries by Volume (Mcf)						
Residential	0	42	2,957	11,446	290,406	NM
Commercial	0	3,479	19,958	28,592	413,405	NM
Industrial	0	0	0	0	5,951	NM
Total Mcf Sales	<u>0</u>	<u>3,521</u>	<u>22,915</u>	<u>40,038</u>	<u>709,762</u>	NM
Total Receipts (Mcf)	0	3,937	23,769	46,059	65,224	NM
Unaccounted for Gas (Mcf)	0	39	204	102	660	NM
UFG as a % of Total Receipts	NM	0.99%	0.86%	0.22%	1.01%	NM
Customers (Average):						
Residential	0	0	11	171	223	NM
Commercial	0	0	2	50	73	NM
Industrial	0	0	0	0	1	NM
Other	0	0	0	0	0	NM
Totals	<u>0</u>	<u>0</u>	<u>13</u>	<u>221</u>	<u>297</u>	NM
Employees (Average)	0	0	0	2	3	NM
Distribution Mains (M. Ft.)	0	33	23,727	86,196	88,783	NM
Transmission Mains (M. Ft.)	0	0	0	0	0	NM
Total Main Pipeline (M. Ft.)	<u>0</u>	<u>33</u>	<u>23,727</u>	<u>86,196</u>	<u>88,783</u>	NM
Total Main Pipeline (Miles)	0	6	4,494	16,325	16,815	NM
Services	0	6	149	267	306	NM

NM = Not Meaningful

NA = Not available

Source: PUC Annual Reports

Leatherstocking Gas Company
Financial and Operating Data and Statistics

Appendix D
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<u>Gas Operation & Maintenance Expenses</u>	<u>2012</u> \$	<u>2013</u> \$	<u>2014</u> \$	<u>2015</u> \$	<u>2016</u> \$	<u>Compound Growth</u>
Natural Gas Production Expenses	0	0	0	0	0	NM
Other Gas Supply Expenses	0	14,532	112,305	173,987	165,862	NM
Natural Gas Storage, Terminating, & Processing Expenses:						
Underground Storage Expenses	0	0	0	0	0	NM
Maintenance	0	0	0	0	0	NM
Total	0	0	0	0	0	NM
Transmission Expenses:						
Operation	0	0	0	0	0	NM
Maintenance	0	0	0	458	0	NM
Totals	0	0	0	458	0	NM
Distribution Expenses:						
Operation	0	7,889	10,039	30,500	30,826	NM
Maintenance	0	0	373	11,336	35,637	NM
Totals	0	7,889	10,412	41,836	66,463	NM
Customer Accounts Expenses	0	0	1,308	4,073	2,156	NM
Customer Service & Inform. Expenses	0	0	0	0	0	NM
Sales Expenses	0	15,758	10,801	40,774	8,152	NM
Administrative & General Expenses:						
Operation	0	181,725	98,822	109,348	151,764	NM
Maintenance	0	0	1,325	939	442	NM
Totals	0	181,725	100,147	110,287	152,206	NM
Total Gas Operation & Maintenance Exp.	0	219,904	234,973	371,415	394,839	NM

NM - Not Meaningful
Source: PUC Annual Reports

