PIKE COUNTY LIGHT & POWER COMPANY
LEATHERSTOCKING GAS COMPANY LLC

MANAGEMENT EFFICIENCY INVESTIGATION
A FOLLOW-UP REVIEW OF THE 2017

FOCUSED MANAGEMENT & OPERATIONS AUDIT REPORT

Pennsylvania Public Utility Commission
Bureau of Audits
September 2021
Docket Nos. D-2020-3022546 and D-2020-3022547

PIKE COUNTY LIGHT & POWER COMPANY
LEATHERSTOCKING GAS COMPANY LLC

MANAGEMENT EFFICIENCY INVESTIGATION
A FOLLOW-UP REVIEW OF THE 2017 FOCUSED MANAGEMENT AND OPERATIONS AUDIT REPORT

Pennsylvania Public Utility Commission
Bureau of Audits
September 2021

Docket Nos. D-2020-3022546 and D-2020-3022547

PIKE COUNTY LIGHT AND POWER
LEATHERSTOCKING GAS COMPANY
MANAGEMENT EFFICIENCY INVESTIGATION

TABLE OF CONTENTS

Chapter		Page
I.	INTRODUCTION	1
	A. Background	1
	B. Objective and Scope	1
	C. Approach	2
	D. Current Events	2
II.	SUMMARY OF MANAGEMENT EFFECTIVENESS AND OPERATING EFFICIENCY	3
III.	ORGANIZATIONAL STRUCTURE AND STAFFING	13
IV.	CORPORATE GOVERNANCE	21
V.	FINANCIAL MANAGEMENT	27
VI.	COST ALLOCATIONS	32
VII.	ELECTRIC OPERATIONS	38
VIII.	GAS OPERATIONS	41
IX.	EMERGENCY PREPAREDNESS	48
X.	CUSTOMER SERVICE	71
XI.	SETTLEMENT AGREEMENT	76
XII.	ACKNOWLEDGEMENTS	77

PIKE COUNTY LIGHT AND POWER
LEATHERSTOCKING GAS COMPANY
MANAGEMENT EFFICIENCY INVESTIGATION

LIST OF EXHIBITS

Exhibit		Page
II-1	Summary of November 2017 Management Audit Recommendations and Staff's Follow-up Findings, Conclusions, and Recommendations	4
III-1	PCLP – Annual External Resourcing Costs	18
VIII-1	PCLP – Main Replaced Compared to LTIIP Goals	42
VIII-2	PCLP – Dispatch and Response Durations	44
IX-1	Public Utility Security Planning and Readiness Self Certification Form	48
IX-2	CNGHC, LGC, and PCLP Emergency Preparedness Oversight Assignments	50
IX-3	CNGHC IT Staffing Levels – Full Time Equivalents	55
X-1	PCLP – Customer Accounts Receivable Aging (60 Days and 120 Days)	75

I. INTRODUCTION

A. Background

In 2017, the Pennsylvania Public Utility Commission (PUC or Commission) Bureau of Audits conducted a Management and Operations Audit (management audit) of Pike County Light and Power Company (PCLP) and Leatherstocking Gas Company (LGC). In November 2017, the Bureau of Audits issued its final report with 33 recommendations for improvement. PCLP and LGC submitted their implementation plan on December 28, 2017, indicating that all 33 recommendations were accepted. On February 8, 2018, at D-2016-25891 and D-2017-2584892, the Commission made the audit report and Implementation Plan public and on March 15, 2018, directed the companies to:

- Proceed with the December 2017 Implementation Plan, and

- Submit progress reports on the implementation annually, by February 1st, for each of the next three years.

Since February 2018, PCLP and LGC have submitted two implementation plan updates as requested by the Commission to ascertain PCLP and LGC's progress in implementing the recommendations from the audit report. Based upon the review of these updates, the Management Audit staff of the Commission's Bureau of Audits (audit staff or auditors) conducted a Management Efficiency Investigation (MEI) of PCLP and LGC's progress in implementing all the original recommendations. Specific items of management effectiveness and operational efficiency may be investigated pursuant to Title 66 Pa. C.S. § 516(b).

B. Objective and Scope

The objective of this MEI is to review and evaluate the effectiveness of PCLP and LGC's efforts to implement the recommendations contained within the management audit report released in 2018. The scope of this evaluation is limited to PCLP's and LGC's efforts in implementing the prior report recommendations in the functional areas of:

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

In addition, the PUC's auditors deemed it prudent to review PCLP's and LGC's compliance with PUC regulations at 52 Pa. Code Chapter 101 regarding physical security, cybersecurity, emergency response, and business continuity plans.

C. Approach

The PUC's auditors began fieldwork on December 1, 2020 and continued through April 22, 2021. The fact gathering process included:

- Interviews with PCLP, LGC, and CNG personnel;
- Analysis of records, documents, and reports of a financial and operational nature, primarily focused on the period 2017-2020, and the year 2021 as available; and,
- Virtual visits to select company facilities.

D. Current Events

On March 6, 2020, the Governor of Pennsylvania, Tom Wolf, declared a disaster emergency due to the COVID-19 pandemic. This and other state government actions ordered all but essential businesses and their operations closed for the safety of the general public. Although fixed utility operations such as electric and gas distribution were considered essential, most of the back-office functions such as corporate management, accounting and government relations were deemed nonessential. Most Pennsylvania utilities closed their business offices and allowed their employees to work remotely. The Pennsylvania Public Utility Commission also closed the main office and allowed employees, including those of the Audit Bureau, to perform their functions remotely. All nonessential travel and in-person meetings were prohibited.

As such, the COVID-19 crisis affected the approach and timeline of the audit. For example, some interviews and data request responses were delayed or modified. In all cases, the PUC auditors worked with PCLP, LGC, and their affiliates to acquire information needed to issue the findings and recommendations contained within this report. Although some aspects of fieldwork were modified and/or unfeasible, we worked to minimize the impact to the conclusions presented within the report. We believe that our procedures sufficiently mitigate the audit risk associated with altering our standard practices. However, conclusions presented within this report may change if additional information is made available. Furthermore, it is important to note that although COVID-19 affected the companies' operations; this report does not, nor was it intended to reflect any modified operations.

II. SUMMARY OF MANAGEMENT EFFECTIVENESS AND OPERATING EFFICIENCY

The PUC auditors found that PCLP and/or LGC effectively or substantially implemented 15 of the 33 prior management audit recommendations reviewed and has taken some action on the remaining 18 recommendations. Among the more notable improvements are:

- PCLP installed all computer systems required to manage operations in a timely manner.
- PCLP reduced overdue customer account balances and bad debt levels.
- PCLP developed an Electric Operations and Maintenance Manual specific to its system.
- PCLP fulfilled all stipulations of its Settlement Agreement.
- PCLP began tracking dispatch times for its gas odor and gas emergency calls.
- PCLP and LGC created documented physical security, business continuity, emergency response, and cybersecurity plans.
- PCLP and LGC began filing Annual Reports on Diversity in 2019.
- IT resources at PCLP and LGC were increased and the companies reviewed their resources regularly.

Although these accomplishments are commendable, the PUC auditors have identified further opportunities for improvement. Specifically, PCLP and/or LGC should:

- Update safety policies and procedures to address all aspects of operation, including electric operations.
- Strengthen the process used to periodically evaluate staffing levels and external resourcing for PCLP's operational workload to ensure the most cost effective and efficient methods are applied.
- Expand the documentation of financial management policies and procedures for LGC and PCLP.
- Update or file a new AIA reflecting LGC's change in ownership and affiliate shared services.
- Ensure all intercompany charges are fully documented and supported by the methodologies and processes prescribed by the PA PUC approved AIA.
- Meet or exceed LTIIP goals to accelerate the replacement of unprotected bare steel and cast-iron mains.
- Develop a formal testing and drill program for the physical security, emergency response, cybersecurity, and business continuity plans.

Exhibit II-1 summarizes the 33 prior recommendations and the auditor's follow-up findings, conclusions, and recommendations. Exhibit II-1 also includes 8 additional findings, conclusions, and recommendations that were identified by the PUC audit staff during fieldwork.

PIKE COUNTY LIGHT AND POWER
LEATHERSTOCKING GAS COMPANY
MANAGEMENT EFFICIENCY INVESTIGATION
SUMMARY OF NOVEMBER 2017 MANAGEMENT AUDIT RECOMMENDATIONS AND STAFF'S FOLLOW-UP FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Prior MA Recommendations	MEI Follow-up Findings and Conclusions	MEI Follow-up Recommendations
III. ORGANZIATIONAL STRUCTURE AND STAFFING (page 13)		
Expand the safety manual to include detailed safety topics related to gas and electric operations.	**III-1** – CNG's safety manual was updated to include LGC and PCLP; however, the updates do not specifically address electric operations.	Update safety policies and procedures to include all aspects of operation, including electric operations.
Document and update annually LGC and PCLP's short- and long-term strategic plans.	**III-2** – PCLP and LGC's strategic planning documents were established; however, incorporating best practices into the existing strategic planning process would support better management oversight.	Introduce formalized elements into the strategic planning process and expand the strategic plan for PCLP and LGC to include metrics, tracking processes, and documentation of analyses that support the corporate objectives.
Develop a staffing plan to document the cost-benefit analyses used to support the decision-making process in determining staffing level resources.	**III-3** – PCLP developed an initial staffing plan based upon its business strategy; however, it should continue to evaluate the level of internal staff and contractors to fulfill operational demands as changes occur.	Strengthen the process used to periodically evaluate internal staffing levels and external resourcing for PCLP's operational workload to ensure the most cost effective and efficient method is in place.
Select, purchase, install, and test all remaining computer systems required to run and manage PLCP in a timely manner.	**III-4** – PCLP has installed all remaining computer systems required to run and manage its operations in a timely manner.	None
Prepare and file annual diversity reports with the Commission.	**III-5** – PCLP and LGC filed Annual Reports on Diversity in 2019, 2020, and 2021.	None

**PIKE COUNTY LIGHT AND POWER
LEATHERSTOCKING GAS COMPANY
MANAGEMENT EFFICIENCY INVESTIGATION
SUMMARY OF NOVEMBER 2017 MANAGEMENT AUDIT RECOMMENDATIONS
AND STAFF'S FOLLOW-UP FINDINGS, CONCLUSIONS, AND
RECOMMENDATIONS**

Prior MA Recommendations	MEI Follow-up Findings and Conclusions	MEI Follow-up Recommendations
IV. CORPORATE GOVERNANCE (page 21)		
Periodically review and update documents applicable to corporate governance of PCLP and LGC.	**IV-1** – CHGHC reviewed and updated the majority of PCLP's and LGC's corporate governance documents, however some remain unaddressed.	Update PCLP's bylaws and ensure the code of conduct and ethics policy is up to date and accessible to employees.
Develop a charter for the CNGHC Nominating and Compensation Committee regarding PCLP and LGC governance.	**IV-2** – CNGHC developed a committee charter for the Nominating and Compensation Committee.	None
Annually evaluate director performance and skillsets taking into consideration emerging needs and priorities, and provide director education and/or modify composition as necessary.	**IV-3** – CNGHC created policies and procedures to evaluate the board and committees instead of individual directors; however, the policies and procedures were not followed in 2020.	Adhere to the Corporate Governance Guidelines and increase the scope of the board of directors and board committee annual performance evaluations, including the evaluation of individual directors.
Develop corporate governance guidelines for PCLP and LGC.	**IV-4** – CNGHC leverages its' corporate governance guidelines to cover its subsidiaries PCLP and LGC; however, the guidelines do not document PCLP and LGC governance activities.	Document corporate governance guidelines for PCLP and LGC and include relevant board activities, duties, and responsibilities for PCLP and LGC.
Set specific performance goals for the LGC president and conduct evaluations of established performance goals annually.	**IV-5** – CNGHC developed fiscal year goals for the LGC president and evaluates goal performance annually.	None

PIKE COUNTY LIGHT AND POWER
LEATHERSTOCKING GAS COMPANY
MANAGEMENT EFFICIENCY INVESTIGATION
SUMMARY OF NOVEMBER 2017 MANAGEMENT AUDIT RECOMMENDATIONS AND STAFF'S FOLLOW-UP FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Prior MA Recommendations	MEI Follow-up Findings and Conclusions	MEI Follow-up Recommendations
V. FINANCIAL MANAGEMENT (page 27)		
Document financial management policies and procedures for LGC and PCLP and ensure documents accurately and appropriately reflect practices in policy.	**V-1** – CNG's financial management policies and procedures were updated; however, documentation for PCLP and LGC specific processes is limited.	Expand the documentation of financial management policies and procedures for LGC and PCLP to ensure policies accurately and appropriately reflect practices.
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.	**V-2** – There are no documented dividend policies for any of the CNGHC companies, including PCLP and LGC.	Develop and document an internal dividend policy for LGC and PCLP, including safeguards to provide advanced notice, and written explanation to the Commission for each dividend payment in excess of 85% of net income.
Develop and document guidelines and policies for budget creation and management including the regular reporting of budget variances for LGC and PCLP.	**V-3** – CNG's financial management policies and procedures do not include any comprehensive policies specific to the budget development and management oversight of PCLP and LGC, including variance reporting.	Document guidelines and policies for budget development and management oversight including the implementation of regular reporting of budget variances for LGC and PCLP.
VI. COST ALLOCATIONS (page 32)		
Enhance the cost allocation manual applicable to LGC and PCLP to reflect all cost allocation and affiliate transaction related processes.	**VI-1** – The cost allocation manual was not updated to reflect processes used to distribute shared corporate costs or allocate shared employee labor costs.	Document all allocation processes and procedures for LGC and PCLP including the predetermined time allocation process for shared employees and predetermined allocations for shared corporate costs.

PIKE COUNTY LIGHT AND POWER
LEATHERSTOCKING GAS COMPANY
MANAGEMENT EFFICIENCY INVESTIGATION
SUMMARY OF NOVEMBER 2017 MANAGEMENT AUDIT RECOMMENDATIONS AND STAFF'S FOLLOW-UP FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Prior MA Recommendations	MEI Follow-up Findings and Conclusions	MEI Follow-up Recommendations
VI. COST ALLOCATIONS (continued)		
Implement mandatory refresher training on time sheet entry for shared employees.	**VI-2** – Mandatory refresher training on time sheet entry for shared employees was not implemented.	Implement mandatory refresher training on exception time reporting for shared employees.
Ensure all charges between affiliates are appropriate, reasonable, documented, and align with the PA PUC approved affiliated interest agreement.	**VI-3** – The PUC auditors were not provided full source documentation to support affiliate charges from CNG to PCLP and LGC.	Ensure all intercompany charges are fully documented and supported by the methodologies and processes prescribed by the PA PUC approved AIA.
	VI-4 – The affiliated interest agreement covering intercompany transactions between LGC, PCLP, and their affiliates is outdated.	File a new, or amend the existing, affiliated interest agreement with the Commission reflecting the updated organizational structure and services between LGC and its affiliates.
VII. ELECTRIC OPERATIONS (page 38)		
Develop and periodically update a systems-specific Pike Electric Operations and Maintenance Manual.	**VII-1** – PCLP developed an Electric Operations and Maintenance Manual specific to its system and plans to periodically update it.	None
Update PCLP's Storm Response and Restoration Plan and tailor it to PCLP's available equipment, resources, and capabilities.	**VII-2** – PCLP's Storm Response and Restoration Plan is tailored to its available equipment, resources, and capabilities.	None

PIKE COUNTY LIGHT AND POWER
LEATHERSTOCKING GAS COMPANY
MANAGEMENT EFFICIENCY INVESTIGATION
SUMMARY OF NOVEMBER 2017 MANAGEMENT AUDIT RECOMMENDATIONS AND STAFF'S FOLLOW-UP FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Prior MA Recommendations	MEI Follow-up Findings and Conclusions	MEI Follow-up Recommendations
VIII. GAS OPERATIONS (page 41)		
Accelerate replacement of unprotected bare steel and cast-iron main for PCLP.	**VIII-1** – Meet or exceed LTIIP goals to accelerate the replacement of unprotected bare steel and cast-iron mains.	Accelerate replacement of unprotected bare steel and cast-iron mains to meet or exceed LTIIP goals.
Track dispatch times for gas odor/emergency calls for PCLP.	**VIII-2** – PCLP began tracking dispatch times for gas odor/emergency calls in 2018.	None
Develop and maintain all gas operation procedures in accordance with federal regulations for PCLP.	**VIII-3** – PCLP developed a Gas O&M Manual that includes all gas operation procedures.	None
IX. EMERGENCY PREPAREDNESS (page 48)		
Develop an emergency response plan for PCLP and update LGC's emergency response plan and review, test, and update it annually.	**IX-1 –** PCLP and LGC updated their emergency response plans.	None
Develop physical security plans for PCLP and LGC, and review, test, and update them annually.	**IX-2 –** PCLP and LCG have documented PSPs.	None
Develop comprehensive business continuity plans for LGC and PCLP and review, test, and update them annually.	**IX-3 –** PCLP and LGC have documented business continuity plans.	None

PIKE COUNTY LIGHT AND POWER
LEATHERSTOCKING GAS COMPANY
MANAGEMENT EFFICIENCY INVESTIGATION
SUMMARY OF NOVEMBER 2017 MANAGEMENT AUDIT RECOMMENDATIONS AND STAFF'S FOLLOW-UP FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Prior MA Recommendations	MEI Follow-up Findings and Conclusions	MEI Follow-up Recommendations
IX. EMERGENCY PREPAREDNESS (continued)		
Develop comprehensive cybersecurity plans for LGC and PCLP, and consider utilizing a cybersecurity risk analysis or cyber vulnerability assessment.	**IX-4 –** PCLP and LGC created documented cybersecurity plans.	None
Increase IT resources at PCLP and LGC and review IT resource needs regularly.	**IX-5** – CNGHC increased IT resources at PCLP and LGC and reviews its IT resource needs regularly.	None
Engage a trusted outside agency or security specialist to conduct a vulnerability assessment and penetration test on PCLP and LGC facilities periodically.	**IX-6** – No penetration testing was conducted at the CNGHC companies.	Partner with a trusted third-party security specialist to perform physical and cyber penetration tests of PCLP and LGC's facilities and systems.
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.	**IX-7 –** Fire extinguishers and first aid kits were installed at gate stations and in company trucks, and the MSDS app was deployed at LGC; however, not all fire extinguishers were inspected appropriately.	Maintain current monthly inspection logs for all fire extinguishers and first aid kits.
Correct minor deficiencies in physical security at PCLP and LGC facilities, implement a system of security inspections at all facilities, and improve security measures.	**IX-8** – Many previously identified deficiencies were corrected; however, additional minor security and safety deficiencies were discovered during facility tours.	Correct minor deficiencies in physical security and safety.

PIKE COUNTY LIGHT AND POWER
LEATHERSTOCKING GAS COMPANY
MANAGEMENT EFFICIENCY INVESTIGATION
SUMMARY OF NOVEMBER 2017 MANAGEMENT AUDIT RECOMMENDATIONS AND STAFF'S FOLLOW-UP FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Prior MA Recommendations	MEI Follow-up Findings and Conclusions	MEI Follow-up Recommendations
IX. EMERGENCY PREPAREDNESS (continued)		
	IX-9 – The process for developing the PSPs, ERPs, Emergency Action Plans (EAPs), and the BCPs is informal and lacks key steps and input.	Formalize the process for developing, reviewing, testing, revising, and training on emergency and continuity plans. Assign primary responsibility for developing the ERP and EAPs to Operations, with support from IT/The Vice President of Gas Supply and Business Development. Primary responsibility for developing the BCP should be assigned to IT, with review and input from Operations.
	IX-10 – The PSP, ERP, and BCP are not sufficiently drilled or tested.	Develop a formal testing and drill program for the PSP, ERP, CSP, BCP, and the EAPs, utilizing a combination of drills, tabletop scenarios, and equipment testing as applicable.
	IX-11 – PCLP has the capability to automatically contact its customers directly during an emergency but has not fully implemented this feature.	Complete a business case for implementing the cell phone alert software to document the cost versus benefits.

PIKE COUNTY LIGHT AND POWER
LEATHERSTOCKING GAS COMPANY
MANAGEMENT EFFICIENCY INVESTIGATION
SUMMARY OF NOVEMBER 2017 MANAGEMENT AUDIT RECOMMENDATIONS AND STAFF'S FOLLOW-UP FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Prior MA Recommendations	MEI Follow-up Findings and Conclusions	MEI Follow-up Recommendations
IX. EMERGENCY PREPAREDNESS (continued)		
	IX-12 – Storm kits required by the PCLP's Emergency Response Plan have not been assembled for immediate emergency use.	Assemble the storm kits required by the PCLP Emergency Response Plan.
	IX-13 – Physical security methods for facilities vary between Pike, Leatherstocking, and Corning.	Build a business case to centralize uniform management of security with unified camera management, unified card reader systems, unified alarm systems, etc. between the companies.
	IX-14 – Trainings and certifications required for IT staff are not documented.	Document required training, certifications, and skills for the IT Manager position for continuing education and to provide a foundational development plan for all future IT positions.
	IX-15 – The company lacks policies governing IT asset lifecycle management.	Establish and document a policy governing IT asset lifecycle management.
X. CUSTOMER SERVICE (page 71)		
Automate the LGC meter reading process to eliminate manual and redundant data entry tasks to improve efficiencies.	**X-1** – LGC concluded that automation was unnecessary based on the number of customers it serves and made no changes to the meter reading process.	Implement improvements to the meter reading process that increase efficiency by eliminating duplicative and manual processes where feasible.

PIKE COUNTY LIGHT AND POWER
LEATHERSTOCKING GAS COMPANY
MANAGEMENT EFFICIENCY INVESTIGATION
SUMMARY OF NOVEMBER 2017 MANAGEMENT AUDIT RECOMMENDATIONS AND STAFF'S FOLLOW-UP FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Prior MA Recommendations	MEI Follow-up Findings and Conclusions	MEI Follow-up Recommendations
X. CUSTOMER SERVICE (continued)		
Document policies and procedures to govern customer service practices.	**X-2** – PCLP developed high-level narratives for accounts receivable, revenues, and cash handling; however, customer service lacks policies and procedures detailing how duties and responsibilities are to be performed.	Complete and distribute PCLP's Customer Service Handbook.
Reduce long-term customer arrearages by implementing various collection methods including increased customer contact, review of customer repayment plans and terms, etc.	**X-3** – PCLP reduced overdue customer account balances and bad debt levels.	None
XI. SETTLEMENT AGREEMENT (page 76)		
Continue efforts to ensure compliance with time-sensitive stipulations of the Settlement Agreement.	**XI-1 –** PCLP has fulfilled the outstanding stipulations of its Settlement Agreements highlighted in the management audit.	None

III. ORGANIZATIONAL STRUCTURE AND STAFFING

Background – In 2016, PCLP was acquired by Corning Natural Gas Holding Corporation (CNGHC) from Orange and Rockland (O&R). CNGHC was also part owner of another Pennsylvania regulated utility, LGC, via a joint venture with Maribito Regulated Industries, LLC (MRI). CNGHC's organizational structure with common ownership interests in two PA regulated utilities resulted in the 2017 focused management and operations audit to be conducted concurrently for both PCLP and LGC.

In this chapter, five prior situations and recommendations are reviewed, and five follow-up findings and three follow-up recommendations are presented. The findings relate to updating safety policies and procedures, expanding strategic planning to include best practices and metrics tracking, strengthening the process to evaluate internal staffing levels and external resourcing for PCLP, establishing core computer systems to support PCLP, and filing Annual Reports on Diversity with the PA PUC.

Finding No. III-1

Prior Situation – PCLP and LGC followed the safety rules and policies created by its affiliate, Corning Natural Gas (CNG). However, CNG's safety rules were not updated since acquiring and hiring staff for PCLP and LGC. As such, there were no specific policies related to electric operations or the LGC and PCLP service territories. Furthermore, changes to operator qualification rules delayed CNG from updating its policies and training. During the prior audit, CNG was considering contracting with a third-party consultant to revise CNG's safety rules and policies.

Prior Recommendation – Expand the safety manual to include detailed safety topics related to gas and electric operations.

Follow-up Finding and Conclusion – CNG's safety manual was updated to include LGC and PCLP; however, the updates do not specifically address electric operations.

Current Review – PCLP and LGC rely on CNG for the administration and dissemination of safety policies, procedures, and training. CNG's Supervisor Safety Training is responsible for all aspects of training, including updating and distributing safety policies and manuals. Training schedules are individually customized to each employee, driven by each employee's operator qualifications licensure requirements or updates to the safety polices, manuals, and/or equipment. Training is provided through multiple methods such as instructor led in-person, hands-on, and group training, where the training method varies depending upon content and need.

The CNG Safety Manual contains broad-based natural gas related procedures. However, no specific safety procedures are identified for electric operations at PCLP in the safety manual and policies. Some safety procedures apply to both gas and electric, but the manual should include information on critical electric considerations like PCLP substation(s) safety procedures, approved/ preferred safety equipment, required PPE for each facility/work requirement, outline voltage variations throughout the PCLP service territory, and other specific processes for the PCLP system that "touch" the electric system. These processes include (but are not limited to): meter reading, meter removal, theft of service, tampering, entrance into substations, line replacement, downed wires, etc. In response, CNG's Supervisor Safety Training indicated that the company is working on an update to the employee safety manual. The update reportedly will include industry best practices and will also address electric safety. Once completed, the Supervisor Safety Training anticipates several sessions with PCLP/LGC staff to perform applicable training on the safety manual update.

Utilities should enforce a consistent safety standard aimed at preventing accidents and injuries for all applicable operations. These safety standards should be used by both employees and contractors doing work on company facilities. However, as of April 2021, the updated Safety Manual had not been completed or finalized. As such, specific safeguards and processes related to electric operations remain undocumented and undefined, which could result in failure to adhere with industry best practices, unsafe conditions, injuries, etc.

<u>Follow-up Recommendation</u> – Update safety policies and procedures to include all aspects of operation, including electric operations.

Finding No. III-2

Prior Situation – At the time of the prior audit, CNGHC had owned PCLP for less than a year and had not incorporated PCLP into any specific strategic planning documents. PCLP relied significantly upon services it received through its Transition Service Agreement with the prior owner, O&R. Due to the limited timeframe of ownership, CHGHC's strategic vision for PCLP was based on compliance with the initial settlement agreement and achieving independent operations thereby, discontinuing the reliance on transitional services provided by the prior owner.

Prior Recommendation – Document and update annually LGC and PCLP's short and long-term strategic plans.

Follow-up Finding and Conclusion – PCLP and LGC's strategic planning documents have been established; however, incorporating best practices into the existing strategic planning process would support better management oversight.

Current Review – A broadly documented process for strategic planning for PCLP and LGC was established in October 2019. However, the high-level documentation does not provide specific detail concerning timeframes for the plan development, staff participation, approval and review requirements, etc. Furthermore, upon review, the growth-focused strategic plan is projected for three years instead of the five-year plan as described in the high-level documented process for LGC and PCLP's short- and long-term planning.

CNG's CEO also serves as the CEO for PCLP and LGC. The CEO stated that he preferred to maintain shorter planning periods as long-term projections can be inaccurate. Therefore, the companies' generally do not update the strategic plan from the initial plan. In fact, the plan was not updated in response to the COVID-19 pandemic, as all CNGHC companies successfully continued operations with relatively minor adjustments. However, the CEO noted that these practices may change if its impending merger with an investment partner is finalized.

Because the companies are relatively small, the management team prefers a more hands-on, informal approach rather than formal documented plans. An example is the budgeting process discussed later in Finding No. III-3. A budget model template is used to construct the annual forecasted budget for all CNGHC subsidiaries, including PCLP and LGC. The budget model is composed of an electronic workbook that reflects the high-level income statement accounts (revenues, expenses, net income) for each CNGHC subsidiary and a narrative documenting the process for determining the O&M budget forecast for each fiscal year. Documented reporting is limited to quarterly updates, with each subsidiaries' statement of accounts highly summarized and lacking significant detail needed for informed decisions (e.g., reflecting "Operating Expenses" in total rather than reflecting the subaccounts comprising their projected operating and maintenance expenses). This process reflects the leadership's preferred management style - PCLP and LGC's executive management and oversight consists of frequent interactions between PCLP's GM and LGC's GM. Formal documentation is limited, with most reporting conducted verbally without written support, formal reports, analyses, etc.

Without clearly documented and adequately detailed objectives, metrics, and tracking processes, PCLP and LGC may not function as effectively or efficiently as management intends because it relies on the management team's memory and attention. Granular and more frequent reporting of data will provide management with additional tools to assist oversight of unplanned or unexpected events (supply chain disruption, storms, etc.). Documented processes should be updated to reflect changes to practices as soon as feasible to ensure consistency and accuracy.

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.

Follow-up Recommendation – Introduce formalized elements into the strategic planning process and expand the strategic plan for PCLP and LGC to include metrics, tracking processes, and documentation of analyses that support the corporate objectives.

Finding No. III-3

<u>Prior Situation</u> – In June 2017, PCLP was in the process of establishing its own workforce, independent of the services and manpower provided by the Transition Services Agreement with its previous ownership. At that time, PCLP was supported by a combination of internal PCLP staff, transitional services provided by O&R, and independent third-party contractors. However, PCLP had not yet created a formal staffing plan, but was submitting quarterly status updates to the Commission on its actions or plans.

<u>Prior Recommendation</u> – Develop a staffing plan to document the cost-benefit analyses used to support the decision-making process in determining staffing level resources.

<u>Follow-up Finding and Conclusion</u> – PCLP developed an initial staffing plan based upon its business strategy; however, it should continue to evaluate the level of internal staff and contractors to fulfill operational demands as changes occur.

<u>Current Review</u> – As of November 2020, PCLP's staffing complement included nine employees, as follows: General Manager (GM), CFO (shared employee), Planner, Designer, two General Technicians and three Customer Service Representatives. Although internal staffing and third-party resources have shifted during the three years since CNG acquired PCLP, the overall staffing levels have remained stable[1]. Due to PCLP's size, staff regularly perform multi-departmental duties. For example, PCLP's CSRs also act as dispatchers, and serve as administrative assistants in fielding calls to the GM when he is out in the field, on another call, etc. PCLP does not have an administrative assistant, so reporting and documentation tasks are performed by the GM or another employee. In addition, the company receives services from numerous contractors to support its operations, often establishing three-year contracts. Both the vegetation removal and electric line support contracts are due for bid during 2021.

As discussed in the prior situation, PCLP provided updates to the Commission on its staffing plan. In its April 2, 2018, status report, PCLP detailed its current and projected staffing levels. Also contained in the update were conclusions from PCLP's cost benefit analyses, including an estimated annual savings of approximately $130,000 through use of a contractor for electric line support and meter reading, based on labor and equipment compared to five FTE employees. However, much of the supporting data for this analysis no longer exists nor is current, and relied upon internal staff's data points instead of an independent market analysis.

When management identifies additional staffing PCLP management submits a business case to the CEO for approval, who applies a business strategy-based methodology for staffing changes. Overall, expansion of internal staff must result in reduced costs and increased efficiency for the company. According to the CEO, increases in staffing are delayed as long as operationally possible, with a preference to

[1] PCLP's fully dedicated internal staffing levels averaged 8-9 FTEs between 2018-2020

outsource services readily available in the market. A summary of the outsourced services and their associated costs are presented in Exhibit III-1.

Exhibit III-1
Pike County Light and Power
Annual External Resourcing Costs
2018-2020

	2018	2019	2020
Electric Contractor	909,161	1,484,276	1,381,452
Call Center Contractor	1,014	771	841
Construction			
Contractor A	953	8,866	30,627
Contractor B	-	22,447	50,048
Contractor C	1,995	62,979	15,620
Contractor D	2,945	4,044	2,815
Vegetation Removal Contractor	392,558	247,661	49,156
Total Costs	$1,308,626	$1,831,044	$1,530,559

Source: Data Request EM-17

It is sound business practice to document applicable cost-benefit analyses when making major decisions. Documentation ensures adequate guidance to future employees and helps to ensure that processes are applied consistently. Although PCLP filed a status update in 2018 for its staffing plan, its ongoing process for fulfillment of its operational requirements is not documented. Lack of documentation creates additional risk for inconsistent application for the review of PCLP's internal and external needs, which could ultimately lead to PCLP overpaying for services or operating without sufficient support. Furthermore, this type of documentation allows a utility to quickly update assumptions, data points, etc. as market conditions or operational situations change. However, in this case, PCLP no longer has the base information so future reviews will need to reevaluate staffing from the beginning.

<u>Follow-up Recommendation</u> – Strengthen the process used to periodically evaluate internal staffing levels and external resourcing for PCLP's operational workload to ensure the most cost effective and efficient method is in place.

Finding No. III-4

Prior Situation – During the transitional period, PCLP relied on O&R's 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). PCLP had purchased and installed its own GIS system but had not responded to the PUC auditors' data request for information on its progress in selecting the OMS, WMS, AMS, and SCADA systems.

Prior Recommendation – Select, purchase, install, and test all remaining computer systems required to run and manage PCLP in a timely manner.

Follow-up Finding and Conclusion – PCLP has installed all remaining computer systems required to run and manage its operations in a timely manner.

Current Review – PCLP's implemented several computer systems since the Management Audit, including:

- Mapping system (July 2017) – provides mapping for electric and gas facilities.
- SCADA (July 2018) –monitoring certain electric and gas facilities or datapoints.
- Asset management (March 2018) – PCLP began leveraging CNG's existing accounting software to track basic asset management data points for assets such as pipes, large transformers, etc. Reportedly the company is exploring a dedicated system that would tie with its mapping and accounting system.
- Outage management system (Sept. 2016) –leverages *Facebook* to provide customers with outage information.
- Work and project management (April 2018)– for both electric and gas work.
- Inventory tracking (3rd quarter of 2018) –used to track receipt and issuance of inventory.

Critical computer systems that support the core function of a utility should be fully installed, tested, and operational. PCLP has established supporting computer systems for its core tasks. Although some systems are not fully automated, the basic operating needs of the company are being met.

Follow-up Recommendation – None

Finding No. III-5

Prior Situation – CNGHC had hired its first PCLP employee in 2016, no annual diversity reports had been filed with the Commission as encouraged by 52 Pa. Code § 69.809. Similarly, LGC had not filed annual diversity reports and neither PA regulated affiliate had been tracking the employment or procurement data necessary to file the reports.

Prior Recommendation – Prepare and file annual diversity reports with the Commission.

Follow-up Finding and Conclusion – PCLP and LGC filed Annual Reports on Diversity in 2019, 2020, and 2021.

Current Review – The PUC Policy Statement on Diversity encourages Major Jurisdictional Utilities to incorporate diversity into their business strategy. This includes developing a business program intended to include a fair proportion of products and service contracts offered to minority, women, and persons with disabilities owned business enterprises.

LGC and PCLP began filing Annual PUC Reports on Diversity in 2019. Although the companies were able to complete all components of the employment section, more work was required to identify if any of the vendors of either utility qualified as diverse vendors. The PUC auditors confirmed with the Board Administrator for PCLP and LGC the ongoing initiatives to identify diverse vendors via supplier questionnaire. PCLP sent out 120 questionnaires, and LGC sent out 52 questionnaires. The companies averaged a 35% response rate, but few diverse vendors were identified.

As a result, PCLP and LGC filed diversity reports in 2021 reflecting that 12% and 2%, respectively, of their supplier spending can be attributed overall to diverse vendors. However, going forward, the detailed totals (total contractor spend, total diverse spend (by category)) should also be included within the reports. The lack of MWDBEs within LGC and PCLP's remote service territories make it challenging for the companies to engage diverse vendors. However, PCLP and LGC are now tracking diverse vendor spending and have identified several businesses in their service areas that may lead to increase engagement for diverse goods/services.

Follow-up Recommendation – None

IV. CORPORATE GOVERNANCE

Background – As discussed in Chapter III – Organizational Structure and Staffing, PCLP and LGC are wholly-owned subsidiaries of Corning Natural Gas Holding Corporation (CNGHC or HoldCo), a holding company publicly traded on OTCQX Best Marketplace (OTCQX) under the symbol CNIG. The CNGHC Board of Directors (CNGHC Board) has eight members, including Corning Natural Gas (CNG) President and Chief Executive Officer (CEO). Although most matters are addressed by the full Board, three committees are used to help conduct its business: Audit Committee; Nominating and Compensation Committee; and the Corporate Governance Committee. In addition to the CNGHC Board, PCLP operates a five-member Board of Directors (PCLP Board) consisting of the PCLP General Manager, along with CNG's President and CEO, Chief Financial Officer (CFO), VP of Operations, and VP of Energy Supply and Business Development. LGC operates under a four-member Board of Directors (LGC Board) consisting of CNG's President and CEO, Chief Financial Officer, VP of Operations, and VP of Energy Supply and Business Development.

In this chapter, five prior recommendations and prior situations are reviewed, and five follow-up findings and three recommendations are presented. The findings relate to PCLP's bylaws, PCLP and LGC-specific corporate governance guidelines, and performance evaluations of executives.

Finding No. IV-1

Prior Situation – Various documents, including CNGHC's Board of Directors' committee charters and the Code of Business Conduct and Ethics (Code) appeared outdated, because they had not been updated since the creation of CNGHC in November 2013. Furthermore, no version control or schedule for reviewing and updating oversight documents had been established. Additionally, PUC auditors observed various other policy and process documents were not reviewed recently, 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).

Prior Recommendation – Periodically review and update documents applicable to corporate governance of PCLP and LGC.

Follow-up Finding and Conclusion – CHGHC reviewed and updated the majority of PCLP's and LGC's corporate governance documents, however some remain unaddressed.

Current Review – CNGHC addressed the majority of guidelines and charters containing policies and procedures consequential to the corporate governance function. For example, CNGHC updated its corporate governance charter in 2018, shortly after the management audit. In addition, corporate governance guidelines were updated in October 2019, which were then approved unanimously by the CNGHC Board of Directors that same month. These guidelines establish high-level oversight of policy and decision-making by the board and management. The guidelines cover: duties and responsibilities of board members and management, board composition and director qualification, board meeting frequency and subject matter, establishment of board committee policies, evaluations of board and committees, etc. However, other documents are outdated or could be improved, most notably PCLP's by-laws and the Code of Business Conduct and Ethics (Code).

PCLP's bylaws have gone through multiple ownership changes since they were last updated in 1994.[2] Therefore, these bylaws remain severely outdated. Many of the documents do not reference PCLP or LGC, instead they focus on CNGHC and imply applicability to all subsidiaries (see Finding No. IV-4).

The Code of Business Conduct and Ethics (Code) has had few, if any, updates since the management audit. CNGHC's Code is difficult to evaluate due to lax version controls. For example, three different versions were discovered during audit fieldwork. The version found on the company's website during the audit contained pre-holding company language and referenced itself as Corning Natural Gas (CNG). The version provided at the outset of fieldwork, which contained a date of February 11, 2013, and included a reference to competitors in the relationship with customer and vendors' section. During fieldwork, the company provided an updated version dated May 2014 and is the only document that refers to the organization as CNGHC and not CNG. CNGHC updated their website with the more current version before the end of fieldwork; however, it does not appear that updates were made to this document since the 2017 management audit.

To avoid use of inaccurate corporate governance documents, policies, and processes, documentation should be periodically reviewed and updated, as necessary, to ensure they align with operations, corporate and governance structure, emerging issues and needs, and remain relevant in providing guidance and information to shareholders, employees, customers, and other stakeholders including the use of proper version controls (e.g., version numbers, dates, approvals, etc.).

Follow-up Recommendation – Update PCLP's bylaws and ensure the code of conduct and ethics policy is up to date and accessible to employees.

[2] Ownership changes of PCLP occurred when Con Edison purchased Orange and Rockland Utilities (O&R) in 1998, and again in 2016 when purchased by CNGHC.

Finding No. IV-2

Prior Situation – CNGHC's committee charters were developed for two of the three board committees, but a charter did not exist for the Nominating and Compensation Committee. Furthermore, several responsibilities of the Nominating and Compensation Committee were either not regularly performed or not performed at all. Although not required by the OCTQX, updated documentation would provide guidance for the Nominating and Compensation Committee, shareholders, and other interested parties.

Prior Recommendation – Develop a charter for the CNGHC Nominating and Compensation Committee regarding PCLP and LGC governance.

Follow-up Finding and Conclusion – CNGHC developed a committee charter for the Nominating and Compensation Committee.

Current Review – CNGHC developed a charter for the Nominating and Compensation Committee in 2018. On December 11, 2018, the HoldCo Board of Directors approved the charter. The charter addresses prominent parts of the New York Stock Exchange (NYSE) Listed Company Manual section's 303A.04 and 303A.05, including annual review and approval of corporate goals and objectives related to CEO compensation, evaluating CEO performance, and determining compensation levels based on this evaluation. Additionally, reviewing and periodically reassessing the adequacy of the charter and recommending changes to the board is contained within the duties and responsibilities.

CNGHC is a publicly traded entity and largely subject to the financial reporting and corporate governance requirements contained in SOX and SEC regulations[3]. Although CNGHC is traded on the OTCQX marketplace and not subject to the corporate governance standards set by the NYSE, it remains a best practice for all PA public utilities to follow industry standards and best practices.

Follow-up Recommendation – None

[3] 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.

Finding No. IV-3

Prior Situation – Performance evaluations of the Board, its individual directors, and its committees were not performed on a regular basis. Although Board members were elected to one-year terms and poor performance could prevent a director from being re-nominated the following year, a holistic performance review was not performed. Moreover, the acquisition of PCLP added an electric utility to CNGHC's holdings but only one director, the CNG CEO, had previous experience with electric utilities. In addition, there was no formal continuing education program in place for directors.

Prior Recommendation – Annually evaluate director performance and skillsets, taking into consideration emerging needs and priorities, and provide director education and/or modify composition as necessary.

Follow-up Finding and Conclusion – CNGHC created policies and procedures to evaluate the board and committees instead of individual directors; however, the policies and procedures were not followed in 2020.

Current Review – As discussed in Finding No. IV-1, CNGHC's updated its corporate governance guidelines and Corporate Governance Committee charter. One of the changes added annual performance evaluations of the board and committees at the end of each fiscal year. In addition, the charter for the Corporate Governance Committee was updated to include reviewing the board evaluation as a specific duty of the Committee. CNGHC's board and committees performed their first evaluations in late-2020; however, they were limited to multiple choice surveys taking several minutes to complete. In addition, the surveys do not appear to follow the corporate governance guidelines or align appropriately to the scope of their respective committees and/or responsibilities.

CNGHC's annual performance evaluations, as constructed, are not thorough or rigorous enough to be of value to the organization and do not follow the guidelines the company created. Although this was the first evaluation and it was conducted during a pandemic, additional improvements aimed at open and honest feedback are necessary. An annual board and committee evaluation, including individual director assessments, improves transparency and communication, increases awareness of emerging needs and priorities, and reveals issues and deficiencies. Addressing identified deficiencies and opportunities enhances management oversight and capabilities.

Follow-up Recommendation – Adhere to the Corporate Governance Guidelines and increase the scope of the board of directors and board committee annual performance evaluations, including the evaluation of individual directors.

Finding No. IV-4

Prior Situation – Despite having a process to review the performance of the CNG and PCLP executive management and director level positions, the CNGHC Board did not directly set goals or review the performance of the CNG CEO who was also the President and CEO of LGC. Although the CNG CEO had goals through the collective corporate, executive, and director level goals, no goals were set specifically for the CEO by the Board. Additionally, the CNG CEO was not part of the incentive compensation program and therefore had no link between compensation and the organization's performance apart from stock ownership.

Prior Recommendation – Develop corporate governance guidelines for PCLP and LGC.

Follow-up Finding and Conclusion – CNGHC leverages its' corporate governance guidelines to cover its subsidiaries PCLP and LGC; however, the guidelines do not document PCLP and LGC governance activities.

Current Review –PCLP or LGC do not have their own corporate governance guidelines and instead rely on CNGHC documentation. As discussed in Finding No. IV-1, CNGHC recently updated its corporate governance guidelines. However, these guidelines do not reference of the regulated subsidiaries, the board or board members of the regulated subsidiaries, or the roles and responsibilities the regulated subsidiaries serve within CNGHC's corporate structure.

Corporate governance guidelines provide a general framework for how the board and its committees carry out their business and responsibilities. They establish the organization's core values and the general structure for guiding governance. PCLP and LGC are relying upon corporate governance guidelines created for their corporate parent without considering the unique structure or functions of PCLP and LGC. Therefore, CNGHC's corporate governance guidelines should be updated and expanded to address all relevant governance activities for both PCLP and LGC.

Follow-up Recommendation – Document corporate governance guidelines for PCLP and LGC and include relevant board activities, duties, and responsibilities for PCLP and LGC.

Finding No. IV-5

Prior Situation – Although there was a process to review the performance of the CNG and PCLP executive management and director level positions, the CNGHC Board did not directly set goals or review the performance of the CNG CEO. The CNG CEO also served as President and CEO of LGC. Although the CNG CEO had goals through the collective corporate, executive, and director level goals, no goals were set specifically for the CEO by the Board. Additionally, the CNG CEO was not part of the incentive compensation program and therefore had no link between compensation and the organization's performance other than through stock ownership.

Prior Recommendation – Set specific performance goals for the LGC president and conduct evaluations of established performance goals annually.

Follow-up Finding and Conclusion – CNGHC developed fiscal year goals for the LGC president and evaluates goal performance annually.

Current Review – CEO performance evaluations are an essential tool used by boards to guide the strategic direction of organizations and achieve organizational goals. As discussed in Finding No. IV-2, CEO compensation related goals and objectives, performance evaluations, and compensation determination are the responsibility of the CNGHC Nominating and Compensation Committees. The company provided the goals and objectives established for the CEO in fiscal years 2019 and 2020, of which the Pennsylvania regulated entities PCLP and LGC are a component.

Follow-up Recommendation – None

V. FINANCIAL MANAGEMENT

Background – PCLP and LGC's financial management functions were performed by Corning Natural Gas (CNG), a subsidiary of CNGHC. These financial management functions include capital and operations and maintenance (O&M) budgeting, financial planning and reporting, treasury and auditing, accounting, etc.

In this chapter, three prior situations and recommendations are reviewed, and three follow-up findings and three follow-up recommendations are presented. The findings relate to expanding financial management policies and procedures specific to PLCP and LGC, developing and documenting a dividend policy for PCLP and LGC, and improving documentation for PCLP's and LGC's strategic planning and reporting processes.

Finding No. V-1

Prior Situation – Shortly before fieldwork began in March 2017, CNGHC had recently acquired PCLP. In addition, CNGHC held a 50% stake in LGC, a joint venture with MRI. LGC began serving customers in PA since 2012 and had recently exceeded the $10 million plant in service threshold which promulgated the first management audit review by the PUC auditors in 2017. As a result, many of the financial management policies and procedures for PCLP and LGC were not documented or did not accurately reflect how the new parent, CNGHC, handled financial functions.

Prior Recommendation – Document financial management policies and procedures for LGC and PCLP and ensure documents accurately and appropriately reflect practices in policy.

Follow-up Finding and Conclusion – CNG's financial management policies and procedures were updated; however, documentation for PCLP and LGC specific processes is limited.

Current Review – As mentioned previously, CNG is responsible for administering the financial management functions for both PCLP and LGC. Thus, CNG's financial management policies and procedures govern processes for all CNGHC affiliates, including CNG, PCLP, and LGC. A review of CNG's financial management policies reflected that all 14 policies were revised and updated in 2020. The financial management policies provide guidance for several core functions including cash, bad debt reserves, debt, financial reporting, regulatory assets and liabilities, etc. but had certain limitations. As discussed in greater detail in Findings III-2 and III-3, no documented dividend policy was established for CNG and its affiliates, nor have comprehensive budget and oversight policies been formally established. Furthermore, only four of the policies contain any specific mention of LGC or PCLP.

Moreover, CNG's financial management policies and procedures are designed to meet New York Public Service Commission regulations. Generally, uniform application of financial management policies for all CNGHC's regulated utilities is not a problem; however, the PUC auditors noted a conflict with Pennsylvania PUC regulations concerning the security deposit policy. Specifically, the CNG policy for Accounts Payable Accrued Expenses provides for security deposits to be collected for negative credit and returned via bill crediting but makes no mention of waiving deposits for low-income customers. Conversely, 52 Pa. Code § 56.32 provides for the following:

- Security deposits can be returned directly to the customer via their request
- Security deposits can be requested for new applicants who fail to establish creditworthiness or for terminated accounts
- Deposits are not permitted to be collected for low-income applicants who qualify for eligibility in a customer assistance program

PCLP and LGC staff confirmed that PAPUC regulations are applied when handling security deposits for Pennsylvania customers. However, those Pennsylvania-specific procedures remain undocumented in any policy or procedure. Documentation of key processes provide a foundation for new staff and help to ensure practices are completed accurately and consistently. Without documentation, PCLP and LGC risk having financial management practices applied incorrectly or inconsistent to PA rules and regulations. Therefore, CNG should incorporate PCLP and LGC specific practices and ensure compliance with PAPUC regulations on an ongoing basis.

Follow-up Recommendation – Expand the documentation of financial management policies and procedures for LGC and PCLP to ensure policies accurately and appropriately reflect practices.

Finding No. V-2

Prior Situation – As mentioned previously, CNGHC had just recently acquired PCLP. A number of policies and procedures for governing financial management of PCLP had not yet been documented, including a dividend policy. At the time, neither PCLP nor LGC had issued a dividend to CNGHC.

Prior Recommendation – Document an internal dividend policy for LGC and PCLP and provide advanced, and written explanation to the Commission for each dividend payment in excess of 85% of net income.

Follow-up Finding and Conclusion – There are no documented dividend policies for any of the CNGHC companies, including PCLP and LGC.

Current Review – As mentioned in Finding III-1, CNG's financial management policies and procedures do not include a dividend policy for any CNGHC subsidiary. Because CNG's policies and procedures are applied broadly to all subsidiaries including PCLP and LGC, neither PCLP nor LGC have a dividend policy. Dividend policies and procedures ensure dividends adhere to specific guidelines and are well-defined between the parent company and their regulated subsidiaries. At a minimum, dividend policies should include:

- Purpose and scope,
- Identification of individual(s) responsible for oversight of the policy,
- Identification of the financial requirements, restrictions, and/or formulas that are used for determining annual dividend payments, and
- Indication of a maximum and target dividend payout range.

The PUC auditors confirmed that CNGHC has not received any dividends from PCLP or LGC since the initial dividend collected from PCLP in 2017. However, if the process remains undocumented, future dividends could be issued without guidance and could cause unintended consequences. For example, it is not sound business practice for a regulated utility to regularly issue dividends to a parent company that exceed 75% to 85 % of net income. The Commission is charged with the regulation and oversight of all public utilities within Pennsylvania and thus has an obligation to ensure that a public utility's dividend practices do not negatively impact service, safety, or reliability. Therefore, the dividend policy should include a provision to notify the Commission of circumstances which warrant a dividend payment greater than 85% of net income prior to the issuance of the dividend payout.

Follow-up Recommendation – **Develop and document an internal dividend policy for LGC and PCLP, including safeguards to provide advanced notice, and written explanation to the Commission for each dividend payment in excess of 85% of net income.**

Finding No. V-3

Prior Situation – CNGHC had recently acquired PCLP and had not yet documented any budgeting or reporting processes for PCLP. Similarly, LGC's budgeting and reporting processes had not been documented. Instead, the established budgeting and reporting process for LGC was incorporated into CNG's, including the preparation of LGC's annual capital and operating budgets. Furthermore, variance reporting for PCLP and LGC was undocumented.

Prior Recommendation – Develop and document guidelines and policies for budget creation and management including the regular reporting of budget variances for LGC and PCLP.

Follow-up Finding and Conclusion – CNG's financial management policies and procedures do not include comprehensive policies specific to the budget development and management oversight of PCLP and LGC, including variance reporting.

Current Review – As mentioned in Finding III-1, CNG's financial management policies and procedures do not include comprehensive budget development and oversight policies for PCLP and LGC. Budget development and management of variances is largely undocumented and governed through biweekly meetings between the senior management of PCLP, LGC, and CNG. Formal documentation is limited to the overall CNGHC variances included in Board of Director meeting presentations. These quarterly board meeting presentations provide a high-level overview of CNGHC's net income only (no operating or capital breakdown is included), by subsidiary. Budget variance explanations are limited to specific transactions (increases in costs or revenues such as fuel expenses, rate case approvals, etc.), identifying specific subsidiaries and their total pretax/net of tax costs and overall changes to earnings per share. Instead, CNGHC reviews variances on a company-wide or consolidated basis and has not established any variance reporting specific to each subsidiary's line-item revenues and/or expenses.

Documentation of key processes is critical to ensure practices are completed accurately and consistently. Without documentation, the risk of mismanagement increases, particularly during transitional times. Variance reporting helps to retain existing knowledge and expertise regardless of management turnover, providing historical guidelines for future officers. Moreover, capturing variances for PCLP and LGC provides more granular insight to variances in operating and capital costs that can be used for future planning.

Reportedly, CNG is working toward creating a process to allow for PCLP financials to be reported independently of these consolidated reviews. Such reporting would aid senior management by creating additional visibility through documenting the variance and by identifying specific, unanticipated changes in projected revenues and/or expenses. Furthermore, the company should document its policies and procedures for budget development, variance reporting, etc.

Follow-up Recommendation – Document guidelines and policies for budget development and management oversight including the implementation of regular reporting of budget variances for LGC and PCLP.

VI. COST ALLOCATIONS

Background – As discussed previously, CNGHC held ownership interests in two Pennsylvania regulated utilities, PCLP and LGC. PCLP is a wholly owned subsidiary of CNGHC; whereas LGC's ownership was split via a joint venture between Maribito Regulated Industries (MRI) and CNGHC[4]. In addition, CNGHC is also the parent company of Corning Natural Gas (CNG). All CNGHC entities provide and/or receive services from all CNGHC affiliates. LGC also received affiliated services from MRI.

In this chapter, three prior situations and recommendations are reviewed, and three follow-up findings, one additional finding, and four follow-up recommendations are presented. The findings relate to expanding the cost allocation manual, introducing time entry refresher training for shared employees, bolstering source documentation for affiliate transactions, and updating the current affiliated interest agreement or filing a new AIA.

Finding No. VI-1

Prior Situation – PCLP and LGC had limited staffing and received substantial levels of shared services through their affiliate, CNG. CNG provided shared services for both PA utilities which included executive management, gas and electric (PCLP only) supply management, accounting and reporting services, customer service training, IT, and cybersecurity, etc. As such, the companies filed affiliated interest agreements (AIAs) with both NY and PA regulatory bodies for approval. Included in those filings was the companies' proposed cost allocation manual (CAM) addressing the division of shared costs between the affiliates. However, the CAM lacked several key items like the process used for determining allocating factors, the predetermined allocators for employee time reporting, and other PA specific information.

Prior Recommendation – Enhance the cost allocation manual applicable to LGC and PCLP to reflect all cost allocation and affiliate transaction related processes.

Follow-up Finding and Conclusion – The cost allocation manual was not updated to reflect processes used to distribute shared corporate costs or allocate shared employee labor costs.

Current Review – An AIA addressing PCLP's and LGC's intercompany transactions with their affiliates, CNG and MRI, was approved by the PA PUC on April 7, 2017[5]. Subsequently, a new AIA replacing the 2017 AIA was approved by the PA PUC on February 4, 2020[6]. The 2020 AIA mirrored the 2017 AIA, but added the following:

- Leatherstocking Pipeline Company (an affiliate)
- Provision to permit non-regulated subsidiaries to guarantee debt of other subsidiaries

[4] See Finding VI-4 for an update on LGC ownership.
[5] Docket Nos. G-2013-2347335, G-2017-2617474 and G-2017-2603575
[6] Docket Nos. G-2019-3008821, G-2019-3009610, and G-2019-3009611

- Clarification that regulated subsidiaries will not provide services at lower than cost

PCLP's and LGC's AIAs are discussed in greater detail in Finding No. VI-4. Conversely, although the AIA was updated in 2020, CNGHC's original CAM had not been updated. Therefore, both the 2020 changes and the deficiencies noted in the 2017 Management Audit remain unaddressed within the CAM.

This means that key processes, such as the process followed for calculating, approving and updating the allocation factors, including the predetermined time allocation factors for shared employees, remain undocumented. Furthermore, as detailed in Finding No. IV-3, the processes used to distribute corporate costs arising from third party vendor costs (e.g., insurance, IT support, communication services, etc.) are not addressed anywhere in the CAM.

The NARUC Guidelines for Cost Allocations and Affiliate Transactions define a CAM as an "indexed compilation of documentation of a company's cost allocation policies and related procedures." Without documentation, intercompany charges to PCLP/LGC could potentially be misapplied or applied inconsistently between CNGHC affiliates. The CFO has ultimate responsibility for oversight of the CAM. However, that position transitioned in 2020 after the retirement of the former CFO. According to the newly hired CFO, his department is working to achieve better documentation of all financial practices. However, the PUC auditors believe that due to lean staffing, the company struggled to document certain key processes[7], including those supporting its cost allocation manual.

<u>**Follow-up Recommendation**</u> – **Document all allocation processes and procedures for LGC and PCLP including the predetermined time allocation process for shared employees and predetermined allocations for shared corporate costs.**

[7] See Chapter V-Financial Management for additional information.

Finding No. VI-2

Prior Situation – PCLP and LGC received and provided shared services between their affiliates, including CNG. To equitably distribute costs between affiliates, the affiliates had filed an affiliated interest agreement (AIA) with the PUC. The AIA indicated that shared employee labor and overhead costs would directly assign costs as practicable. However, in most cases, employee time is automatically distributed between entities based upon the employee's predetermined allocators, thus are governed by CNG's time reporting process. Nonetheless, the PUC auditors found that the policies and procedures governing time sheet entry were outdated and no training/education had occurred.

Prior Recommendation – Implement mandatory refresher training on time sheet entry for shared employees.

Follow-up Finding and Conclusion – Mandatory refresher training on time sheet entry for shared employees was not implemented.

Current Review – As found during the management audit, the AIA currently states that direct charging will be used to distribute shared costs; however, shared employees do not manually record time. Instead, predetermined allocations are established annually for shared employees based upon an estimate of the amount of time dedicated on each entity (i.e., CNG, Pike-Electric, Pike-Gas, and LGC).

Nonetheless, CNGHC's approved AIA and CAM indicate that costs for shared employees are to be directly charged whenever possible. However, due to the methodology used by CNGHC and its subsidiaries, direct charging is rare and was only used by one shared services employee. Therefore, mandatory refresher training was viewed by the company as unnecessary. Instead, the company focuses on reviewing predetermined time allocations annually by shared employees and their supervisors. The predetermined time allocations are updated every March and are valid until the following February.

Despite the use of predetermined time allocations, shared employees should undergo mandatory refresher training to help ensure that deviations in assignments between entities are captured via direct charge. Without refresher training, shared employees who deviate from routine activities risk disproportionately assigning costs unfairly between affiliates. Mandatory refresher training can also support the AIA by ensuring that charges are distributed appropriately between entities.

Follow-up Recommendation – **Implement mandatory refresher training on exception time reporting for shared employees.**

Finding No. VI-3

Prior Situation – As mentioned earlier, PCLP and LGC receive various services from CNG. Intercompany transactions that occurred between PCLP and LGC and their affiliates were sampled and tested by the PUC auditors. However, source information related to the payroll journal entries from CNG to PCLP were not provided. Therefore, the PUC audit staff could not verify how CNG determined the payroll amounts charged from CNG to PLCP.

Prior Recommendation – Ensure all charges between affiliates are appropriate, reasonable, documented, and align with the PA PUC-approved affiliated interest agreement.

Follow-up Finding and Conclusion – The PUC auditors were not provided full source documentation to support affiliate charges from CNG to PCLP and LGC.

Current Review – The PUC audit staff sampled CNG source documentation for its charges to PCLP and LGC intercompany transactions occurring in May 2019. Pass through corporate charges with direct assignment to PCLP and LGC could be clearly verified and were well-documented. Predetermined time allocations for shared employees were also documented. Allocation percentages are updated annually every March via a memo and includes both the predetermined time allocations and the shared service allocation percentages. The PUC was auditors were able to successfully tie labor charged from the shared service employees to both PCLP and LGC.

However, several exceptions were noted. None of the intercompany charges sampled used the shared service allocation percentages documented for May 2019.[8] As defined by the AIA and CAM, allocations are calculated annually by shared service type. Although direct assignments for corporate costs could be identified, allocated amounts did not match those shared service allocations as defined by the AIA, CAM, or annual allocation memo. Furthermore, documentation supporting the calculations (i.e., yearend data for each affiliate) used to determine shared service allocations was requested, but was never provided by the company.

Per the NARUC Guidelines for Cost Allocations and Affiliated Transactions, an audit trail should exist with respect to all transactions between a regulated utility and its affiliates. The failure to provide complete source documentation compromises the regulatory process and could result in the exclusion of intercompany expenses for rate recovery in future proceedings by the PA PUC. Limited staff resources were cited by the company as the reason that documentation and tracing of intercompany transactions was not a focus for the CNGHC affiliates. However, with incomplete source documentation, CNG has limited assurance that charges billed to LGC an PCLP are accurate or justifiable. Based upon our limited sampling, PUC audit staff found no indication of cross-subsidization or inappropriate charges, however, the

[8] As noted previously, intercompany charges verified use of the predetermined time allocations and direct assignment only.

absence of fully supported source documentation increases the risk of inconsistent and/or unfair division of shared costs.

<u>Follow-up Recommendation</u> – Ensure all intercompany charges are fully documented and supported by the methodologies and processes prescribed by the PA PUC approved AIA.

Finding No. VI-4

Additional Finding and Conclusion – The affiliated interest agreement covering intercompany transactions between LGC, PCLP, and their affiliates is outdated.

Current Review – On July 1, 2020, MRI divested its ownership interests in LGC and LPC-PA. As a result, LGC became a fully-owned subsidiary of CNGHC. At that time, MRI also ceased providing support services. Those services consisted of accounts receivable and billing functions performed by LGC.

Beginning in July 2020, LGC's billing services transitioned to CNG. Likewise, LGC's accounts receivable function was also brought in-house. The PUC auditors confirmed that LGC's Office Manager is now responsible for the accounts receivable function. Furthermore, the CFO relayed that a new operating agreement between LGC and CNG was being drafted to reflect the updated ownership structure and changes to support services received by LGC due to the elimination of MRI. However, it was not complete as of the end of fieldwork.

Pa. C.S. § 2102 requires Pennsylvania public utilities to obtain Commission approval for arrangements or contracts with affiliated companies for goods and services, such contracts should accurately identify affiliates. As such, LGC's change in ownership and operations has rendered its PA PUC-approved AIA out of date. As discussed in Finding No. VI-1, LGC and its affiliates filed a new AIA in 2020. However, the changes did not include the subsequent MRI divesture and change in operations. Therefore, the PUC audit staff recommends LGC file a new, or amend its existing AIA, with the Commission as soon as possible.

Follow-up Recommendation – File a new, or amend the existing, affiliated interest agreement with the Commission reflecting the updated organizational structure and services between LGC and its affiliates.

VII. ELECTRIC OPERATIONS

Background – PCLP is an electric and gas distribution company, which serves approximately 4,700 electric customers, and almost 1,200 gas customers in northeastern Pike County, PA. PCLP has 100 miles of overhead electric distribution lines, 40 miles of underground electric distribution lines, and 19 miles of gas pipeline. PCLP's Electric Operations consists of a Planner and two General Technicians under a General Manager. PCLP also employs contractors for electric line construction; vegetation management; gas construction and inspection; and inspection and maintenance. The General Technicians are primarily gas technicians, who were trained to install, read, or disconnect an electric meter. All other electric technician work is done by contractors.

In this chapter, two prior recommendations and prior situations are reviewed, and two follow-up findings, and no recommendations are presented. The findings relate to PCLP's electric Operation and Maintenance Manual, and the Storm Response Plan.

Finding No. VII-1

Prior Situation - PCLP had various policies and procedures typically found within an operations and maintenance (O&M) Manual. For instance, PCLP had a series of schematics for construction and installation of field equipment; 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 and had to be requested from O&R, which was performing O&M activities for PCLP at the time.

Prior Recommendation VIII-1 – Develop and periodically update an Electric Operations and Maintenance Manual specific to PCLP's system.

Follow-up Finding and Conclusion – PCLP developed an Electric Operations and Maintenance Manual specific to its system and plans to periodically update it.

Current Review – It is best practice to have an Operations and Maintenance Manual readily available with information on how to operate and maintain equipment and systems used by a utility. Having this information organized and readily available ensures that the information can be accessed during an emergency even by personnel not familiar with specific equipment or system.

The General Manager finished updating the O&M Manual to its latest version in November 2020, with the company's goal to update it at least annually. The original O&M Manual by O&R was modified and used initially, but the current O&M manual is a modified version of CNGHC's manual, tailored to PCLP's resources. The topics are the same as CNGHC's, but the details within were modified to match PCLP's resources or company specific policies and procedures. The O&M Manual includes such features as vegetation management and infrastructure inspections with required schedules for all types of inspection. The inspections plans are tailored to PCLP's resources and no longer rely on O&R. Instead, PCLP uses a mix of full-time staff, full-time "in-house" contractors, and temporary "outside" contractors to perform its operations and maintenance. Therefore, PCLP has successfully incorporated its own capabilities, policies, and procedures, etc. within its O&M manual.

Follow-Up Recommendation – None

Finding No. VII-2

Prior Situation - PCLP's Storm Response and Restoration Plan had been created by O&R, and it defined communication roles of PCLP, but did not include specifics, like phone numbers and example messages. Although O&R used a "Company Storm Classification Matrix," as a guide to prioritize the repair orders, the matrix did not include life-threatening emergency situations or where rescue or firefighting efforts were being prevented by PCLP's electrical equipment. Lastly, the Storm Response and Restoration Plan was not tailored to PCLP's available equipment, resources, and capabilities.

Prior Recommendation VIII-2 – Update PCLP's Storm Response and Restoration Plan and tailor it to PCLP's available equipment, resources, and capabilities.

Follow-up Finding and Conclusion – PCLP's Storm Response and Restoration Plan is tailored to its available equipment, resources, and capabilities.

Current Review – PCLP has a document entitled "Emergency Response Procedure". However, this plan appears to be a storm response plan, rather than an emergency response plan (ERP), as it does not currently include non-storm related emergency plans (for more information on the ERP, see Chapter IX – Emergency Preparedness, Finding and Conclusion IX-5). For the purposes of this report and to alleviate any confusion, the auditors will refer to the Emergency Response Procedure as the company's Storm Response and Restoration Plan (SRRP).

The SRRP is tailored to PCLP's available resources, including call center management and how to prioritize in an emergency. There is a section on the Information Group, which interfaces with municipal governments and complies with the PUC reporting requirements and includes contact information for internal and external stakeholders, including the PUC. Incident prioritization is included, and now classifies 911 calls as the top priority. In addition, the SRRP details outage management, damage assessment, restoration, stores and material distribution, and resources recovery within the incident flow and priority section. Furthermore, PCLP's SRRP includes three mutual aid agreements, with the PREA (Pennsylvania Rural Electric Association), NAMAG (North American Mutual Assistance Group), and the Sussex Rural Electric Cooperative. All mutual aid agreements are current and meet Edison Electric Institute criteria.

It is best practice for a distribution utility's emergency plans to be tailored to the company's available resources. PCLP has tailored its Emergency Response Procedure to its own resources and has revised its incident prioritization to emphasize emergency calls. Thus, PCLP is better prepared to respond to storm related outages and emergencies.

Follow-Up Recommendation – None

VIII. GAS OPERATIONS

Background – As of July 1, 2020, LGC became a wholly-owned subsidiary of CNGHC, after CNGHC purchased Morabito Regulated Industries' 50% share. The company provides gas service to less than 500 customers in Susquehanna County. LGC's Gas Operations department consists of its VP Operations, a Gas Technician Supervisor, and two Gas Technicians.

PCLP is an electric and gas distribution company that serves approximately 4,700 electric customers, and almost 1,200 gas customers in northeastern Pike County, PA. PCLP has 100 miles of overhead electric distribution lines, 40 miles of underground electric distribution lines, and 19 miles of gas pipeline. PCLP's Gas Operations department consists of a Planner and two General Technicians who report to the General Manager. PCLP also utilizes contractors for electric line construction; vegetation management; gas construction and inspection; and inspection and maintenance. The General Technicians are primarily gas technicians, who were trained to install, read, or disconnect an electric meter. All other electric technician work is done by contractors.

In this chapter, three prior recommendations and prior situations are reviewed, and three follow-up findings, and one recommendation are presented. The findings relate to pipeline replacement, dispatch times for gas odor/emergency calls, and operations and maintenance procedures.

Finding No. VIII-1

Prior Situation - Orange and Rockland (O&R) was performing most of the operations and maintenance work for PCLP via the temporary service agreement (TSA). Additionally, prior to September 1, 2016, O&R was responsible for PCLP's main and service replacement activity. However, this activity resulted in less than half a mile of main replacement in the previous seven years. Moreover, PCLP had not replaced any mains or services from 2014 through 2016 and had no plans to replace any mains or services in 2017.

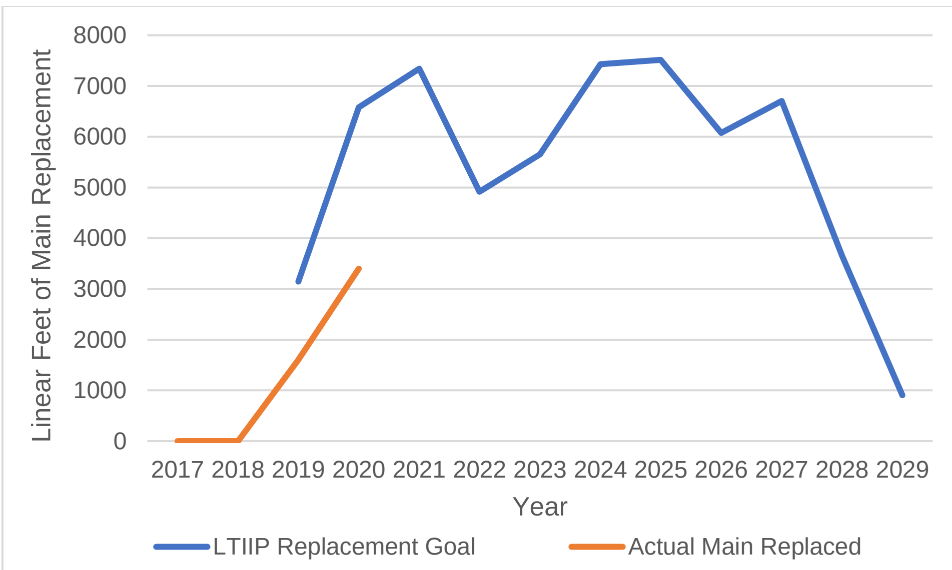
Prior Recommendation – Accelerate replacement of unprotected bare steel and cast-iron main for PCLP.

Follow-up Finding and Conclusion – PCLP accelerated replacement of its unprotected bare steel and cast iron main but has fallen short of its goals set in its Long-Term Infrastructure Improvement Plan (LTIIP).

Current Review – According to its currently PUC approved LTIIP, PCLP's goals are to replace or retire all its bare steel and cast-iron mains by 2029. This would necessitate the retirement or replacement of 29,000 feet of cast-iron mains, 4,600 feet of wrought iron mains, 32,000 feet of bare steel mains, and 611 associated service connections. Twenty specific projects were identified for main replacement over the 11-year period of the LTIIP from 2019 through 2029. These goals were set because of a cast iron and bare steel study initiated to comply with the Settlement Agreement[9].

PCLP replaced no main in 2017 and 2018, at least partially due to its recent acquisition by CNGHC. Nonetheless, the company began replacing main in 2019, corresponding to a cast iron and bare unprotected steel replacement rate of 7.4% or 13.5 years for 2019 and 2020, respectively. Exhibit VIII-1 compares actual main replaced from 2017 through 2020 to PCLP's LTIIP goals from 2019 through 2029.

Exhibit VIII-1
Pike County Light and Power
Main Replaced Compared to LTIIP Goals
For 2017 Through 2029*



*2020 Actual Main Replacement is predicted as of 11/30/2020.
Sources: Data Requests GO-2 and GO-3.

The company's goal, according to the LTIIP, is to replace all 12.76 miles of non-plastic main with plastic main by 2030. The schedule specifically calls for 3,147 feet of main to be replaced in 2019, followed by 6,582 feet in 2020. By that metric, PCLP is already behind its own proposed schedule by 4,729 feet or 7% of the total project mileage by the end of the year 2020. (2021 figures are not yet available).

Some of the delays in main replacement were due to emerging factors or conditions outside the company's control. For instance, in 2019, PCLP effectively suspended main replacement projects to address an active leak. Furthermore, a

---

[9] The Settlement Agreement between the Office of Consumer Advocate, the Office of Small Business Advocate, CNGHC, PCLP, and O&R, approved by The Commission at Docket number A-2015-2517036 on August 11, 2016 required that PCLP 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.

project slated for year end 2020 was delayed by the COVID-19 pandemic, due to delayed approval of soil and conservation permits.

To streamline the process, the soil conservation group plans to request one permit application for the entire 10-year project instead of individual applications for each year and has already hired a contractor to survey, plan, and prepare the application. With that permit, the company expects to be able to submit annual projects for a simplified approval process. The pandemic further complicated the company's efforts due to shortages in labor and materials in 2020 PCLP hopes the umbrella permit will address some of these issues. By planning these replacement projects in advance for the next decade, PCLP should be able to secure sufficient contractors. Management acknowledges this combined permit application has slowed current main replacement efforts but should accelerate them in the future.

The auditors acknowledge that PCLP set aggressive goals for cast iron and bare steel main replacement, and many delays were outside the control of the company. The fact remains that the company has fallen behind its original LTIIP goals. Many of the company's efforts, like securing contractors and permits in advance, will help. However, PCLP will need to accelerate its replacement progress in future years to meet its LTIIP goals.

<u>Follow-Up Recommendation</u> – Meet or exceed LTIIP goals to accelerate the replacement of unprotected bare steel and cast-iron mains.

Finding No. VIII-2

Prior Situation - Track dispatch times for gas odor/emergency calls for PCLP.

Prior Recommendation – PCLP was using O&R's call center to receive gas odor/emergency calls and dispatch technicians. This outsourcing was to continue until PCLP implemented its own Customer Information Management System (CIMS), which was expected to go live in the fourth quarter of 2017. Meanwhile, all response times[10] were within 45 minutes from 2014 through 2016. However, dispatch[11] times for PCLP were not tracked.

Follow-up Finding and Conclusion – PCLP began tracking dispatch times for gas odor/emergency calls in 2018.

Current Review – PCLP's gas dispatch and response times are presented in Exhibit VIII-2. Records for dispatch and response times in 2017 are unavailable because O&R was responsible for operations services under the TSA and did not provide these records to PCLP. After the TSA with O&R ended, PCLP began tracking its dispatch and response times for gas/odor emergency calls as presented below.

Exhibit VIII-2
Pike County Light and Power
Dispatch and Response Durations
For 2015 Through 2020 YTD*

	2017 Audit		Current Audit			
Dispatch Time						
Dispatch Time	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
0-15 minutes	100%	100%	N/A	96%	100%	100%
16-30 minutes	0%	0%		0%	0%	0%
30+ minutes	0%	0%		4%	0%	0%
Response Time						
	2015	**2016**	**2017**	**2018**	**2019**	**2020**
0-30 minutes	80%	50%	N/A	89%	100%	78%
31-45 minutes	20%	50%		4%	0%	22%
46-60 minutes	0%	0%		0%	0%	0%
60+ minutes	0%	0%		7%	0%	0%

*As of 12/8/2020
Sources: Data Request GO-4 and the 2017 LGC and PCLP Audit Report

[10] Response time is defined as the time from the company becoming aware that there is an issue to the time that company personnel arrive on scene.
[11] Dispatch time is defined as the time from the company becoming aware that there is an issue to the time that a company employee is dispatched to the scene.

Most dispatch times have remained less than 15 minutes since 2015. In addition, response times have improved, from an average of less than 45 minutes in 2015-2016 to averages of less than 30 minutes in 2018-2020 (as of 12/8/2020). The company attributes the overall reduction in response times to the proximity of the current technicians to their respective service territory as well as calls now going directly from the call center to the technician. Under the TSA, calls were routed from the call center to the General Manager, then from PCLP's General Manager to O&R, before the O&R technician was dispatched.

The Pennsylvania Public Utility Commission, as a safety metric, requests all jurisdictional PA natural gas distribution companies (NGDCs) 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. PCLP's average performance meets the Gas Safety Division's recommended gas/odor dispatch and response times and PCLP can monitor, evaluate, and improve performance related to gas odor/emergencies.

<u>Follow-Up Recommendation</u> – None

Finding No. VIII-3

<u>Prior Situation</u> - Although LGC maintained comprehensive operations and maintenance (O&M) procedures in accordance with 49 CFR § 192.605 on all aspects of gas operations, PCLP had been using O&R's O&M procedures due to the recent transition. Therefore, for PCLP, only limited procedures were provided to the auditors, such as cast-iron work procedures, pressure testing, plastic pipe installation, inside/outside odor leak investigation, and damage to company facilities. Despite auditor requests, procedures on corrosion control, emergency response, safety, odorization, testing, etc. were not provided or available. Moreover, some of O&R's procedures had not been updated within the 15-month requirement as noted in the current review discussion and, in some cases, were five years old. Furthermore, with the anticipated termination of the TSA in the spring of 2018, PCLP needed to develop its own O&M procedures when it no longer received service from O&R.

<u>Prior Recommendation</u> – Develop and maintain all gas operation procedures in accordance with federal regulations for PCLP.

<u>Follow-up Finding and Conclusion</u> – PCLP developed a Gas O&M Manual that includes all gas operation procedures.

<u>Current Review</u> – PCLP developed its own O&M procedures manual, independent from O&R, in 2019. The O&M manual contains sections on corrosion control; plastic pipe joining; inspections and surveys; cast iron work procedures; pressure testing; damage to company facilities; emergency response; safety; odorization; testing; patrolling and leak surveys; handling odor complaints and responding to odor incidents; inactivation and abandonment of facilities; safety-related condition reporting; root cause investigations; leak surveillance; etc.

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
- Surveillance, emergency response and accident investigation.

PCLP's procedures are reviewed annually, which includes a revision process with change tracking and documentation. Individual procedures and subsequent revisions are dated as well. On the other hand, there were no records in the O&M

Manual of reviews performed. The document was assembled in 2019 and although individual procedures have been reviewed and revised, the manual was not reviewed in its entirety since then, because it had not yet been 15 months since the O&M Manual had been created. CNGHC usually initiates reviews of specific procedures as needed. The last procedure to be reviewed in the summer of 2020 was the inside inspection of interior piping. As such, PCLP has created its own operations and maintenance procedures and manual, independent of O&R.

<u>Follow-Up Recommendation</u> – None

IX. EMERGENCY PREPAREDNESS

Background – The 2017 Focused Management and Operations Audit of Pike County Light and Power Company and Leatherstocking Gas Company LLC, conducted by the Pennsylvania Public Utility Commission Bureau of Audits, released in November 2017 at D-2017-2584891 and D-2017-2584892, contained eight recommendations for the Emergency Preparedness functional area. The Bureau rated this area as needing significant improvement. The PUC auditors incorporated several prior recommendations into this review and deemed it prudent to perform an updated review of the company's compliance with PUC regulations at 52 Pa. Code § 101 regarding physical security, cyber security, emergency response and business continuity plans. Therefore, four follow-up findings, eight new findings, and eleven recommendations are presented.

To protect infrastructure within the Commonwealth of Pennsylvania and ensure safe, continuous, and reliable utility service, effective June 2005, PUC regulations at 52 Pa. Code § 101 (Chapter 101) require all jurisdictional utilities to develop and maintain written physical security, cyber security, emergency response, and business continuity plans. Furthermore, in accordance with 52 PA Code § 101.1, all jurisdictional utilities are to annually submit a Self-Certification Form to the Commission documenting compliance with Chapter 101. This form, available on the PUC website, includes 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.

The PUC auditors use a NIST (National Institute of Standards and Technology) Cybersecurity Framework-based audit plan, modified to address the needs and capabilities of the PUC and the Pennsylvania utility companies. Ultimately, due to the sensitive nature of the information reviewed, specific information is not revealed in the audit report; instead, the generalities of the information reviewed are discussed.

Due to travel restrictions caused by the COVID-19 pandemic, in-person review of confidential security information (CSI) documents was not possible. Instead, the emergency plans were reviewed through alternative means albeit constrained by limitations with technology and/or security. In addition, as travel for direct inspections was not possible, the auditors performed remote inspections at a limited sample of company facilities using video conferencing technology when available. For these reasons, certain aspects of the normal review of company security measures could not be completed during fieldwork. Therefore, the findings and conclusions discussed in this report account for the issues discovered during this modified fieldwork and do not preclude additional findings if there had been no restrictions.

During fieldwork, the auditors reviewed the most recent (i.e., 2019) Self Certification Forms submitted by Leatherstocking Gas Company (LGC) and Pike County Light and Power (PCLP). Our examination of LGC and PCLP'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. LGC and PCLP, along with Corning Natural Gas (CNG), a New York-based natural gas utility, are all wholly-owned subsidiaries of Corning Natural Gas Holding Company (CNGHC). Because security and emergency preparedness policies, plans, and measures are often shared between the three utilities and CNGHC, these measures were reviewed at the non-Pennsylvania-based utilities where applicable. The auditors also conducted remote inspections at a limited sample of CNGHC, CNG, LGC, and PCLP's facilities, including control centers, gate stations, substations, offices, and storage facilities.

The personnel assigned responsibility for testing, reviewing, and updating the physical security, emergency response, business continuity, and cybersecurity plans for LGC and PCLP are illustrated in Exhibit IX-2.

Exhibit IX-2
CNGHC, LGC, and PCLP
Emergency Preparedness Oversight Assignments

	CNGHC	LGC	PCLP
Emergency Response Plan	VP Operations, CNGHC, CNG, and LGC	VP Operations, CNGHC, CNG, and LGC	General Manager, PCLP
Business Continuity Plan	Officers*	Officers*	Officers*
Physical Security Plan	VP Operations, CNGHC, CNG, and LGC	VP Operations, CNGHC, CNG, and LGC	General Manager, PCLP
Cybersecurity Plan	VP Gas Supply and Business Development	VP Gas Supply and Business Development	VP Gas Supply and Business Development

*Officers include the President and CEO – all companies; the CFO/Treasurer – all companies; the VP Gas Supply and Business Development – all companies; the General Manager – PCLP; and the VP Operations – CNGHC, CNG, and LGC.
Source: Data Request EP-6 and Interview EP-1

Finding No. IX-1

Prior Situation – LGC had a comprehensive ERP covering various emergencies, incident command structure, etc. However, the EPR failed to identify notification points for outages and did not have contact information for the PA PUC within the ERP. In addition, PCLP had not established its own ERP because the Transition Service Agreement (TSA) was still in effect. PCLP was planning to create their own plan once the TSA expired.

Prior Recommendation – Develop an emergency response plan for PCLP and update LGC's emergency response plan and review, test, and update it annually.

Follow-Up Finding and Conclusion – **PCLP and LGC updated their emergency response plans.**

Both LGC and PCLP have updated their emergency response plans routinely. However, testing of the ERP usually occurs because of storm events and could be improved (see Finding No. IX-10). In addition, the process to update and revise the ERP could be improved (see Finding No. IX-9).

Follow-Up Recommendation – None

<u>Finding No. IX-2</u>

<u>Prior Situation</u> – PCLP had some elements of a PSP in place (i.e., physical security for its main office in Milford), it did not have a documented plan. In addition, LGC's PSP was limited and only addressed corporate physical security goals and a description of existing security equipment and measures.

<u>Prior Recommendation</u> – Develop physical security plans for PCLP and LGC, and review, test, and update them annually.

<u>Follow-Up Finding and Conclusion</u> – **PCLP and LGC have documented PSPs.**

Both LGC and PCLP have Physical Security Plans. Many aspects of these plans are similar, like the corporate goal section but each plan is tailored to the specific company, security measures, and site-specific requirements. These plans are reviewed and updated routinely. However, testing of the PSP has not occurred beyond in-house reviews and could be improved (see Finding No. IX-10). In addition, the process to update and revise the PSP could be improved (see Finding No. IX-9).

<u>Follow-Up Recommendation</u> – None

Finding No. IX-3

Prior Situation – Due to the transition from O&R, PCLP relied on O&R for business continuity through the TSA. Therefore, no BCP was documented for PCLP. In addition, the BCP for LGC was very basic and consisted of a goal to ensure security and a description of office and record keeping procedures.

Prior Recommendation – Develop comprehensive business continuity plans for LGC and PCLP and review, test, and update them annually.

Follow-Up Finding and Conclusion – **PCLP and LGC have documented business continuity plans.**

LGC and PCLP's business continuity plan is combined with the corporate BCP for all CNGHC's subsidiaries. It includes many recovery paths and focuses more on recovery from IT related incidents. However, the plan does identify BCP responsibilities throughout the companies. Still, the process for updating and revising the BCP is not ideal and could be improved (see Finding No. IX-9). In addition, the companies remain unsure how they plan to test the BCP in the future (see Finding No. IX-10).

Follow-Up Recommendation – None

Finding No. IX-4

Prior Situation – At the time of the management audit, O&R was managing the customer and system data for PCLP through the TSA. Therefore, PCLP did not have a CSP. In addition, LGC's cybersecurity plan was its employee handbook and narrowly focused on handling sensitive data only. Also, neither PCLP nor LGC had ever performed a risk analysis.

Prior Recommendation – Develop comprehensive cybersecurity plans for LGC and PCLP, and consider utilizing a cybersecurity risk analysis or cyber vulnerability assessment.

Follow-Up Finding and Conclusion – **PCLP and LGC created documented cybersecurity plans.**

CNGHC created a corporate wide cybersecurity plan that encompasses all regulated subsidiaries including PCLP and LGC. In addition, the companies created a risk register that is reviewed and updated regularly. The company has also performed some testing of its CSP, hiring a third party to perform a risk analysis of its system in July 2020, but could benefit from additional third-party testing (see Finding No. IX-6).

Follow-Up Recommendation – None

Finding No. IX-5

Prior Situation – In 2017, LGC's IT resources and support were provided by CNG. Similarly, once PCLP's Transitional Service Agreement (TSA) with O&R expired in February 2018, CNG planned to begin providing IT resources and support for PCLP as well. CNG's IT staff consisted of one full-time technical position who reported to CNG's Vice President of Administration. Cybersecurity risk analyses had not been performed for PCLP or LGC, thus the timeframe for sustained operations without critical cyber components (a critical piece of business continuity) had not been determined. Some of the cyber security processes were regularly tested, but the resources were not available to conduct more extensive testing. The IT department indicated that it was unable to perform certain scheduled testing, updates, training, and other maintenance activities. While these resource shortages were occurring, PCLP was planning to bring several new systems online by February 2018 as part of the transition of services from O&R. These systems would have required additional regular maintenance and management, thus increasing the staffing and resource requirements above the current needs, which were already not being met.

Prior Recommendation – Increase IT resources at PCLP and LGC and review IT resource needs regularly.

Follow-Up Finding and Conclusion – **CNGHC increased IT resources at PCLP and LGC and reviews its IT resource needs regularly.**

Current Review – PCLP's IT transitioned from O&R to CNGHC in February 2018, when the extended TSA ended. Since that time, CNGHC hired a virtual Chief Information Officer (VCIO) in March 2018. A VCIO is a part-time consultant that acts as the CIO for companies not requiring a full time CIO. The VCIO oversees IT and cybersecurity needs such as backups, patching, and architecture planning for all of CNGHC's holdings, including PCLP and LGC. In 2020, CNGHC contracted with an IT consulting firm to provide resources. The IT firm is currently providing various functions like security analysis, business development, service/help desk support, cybersecurity training, server configuration, etc. via four part-time positions. Exhibit IX-3 shows the IT staffing levels for CNGHC.

Exhibit IX-3
Corning Natural Gas Holding Company
IT Staffing Levels – Full Time Equivalents (FTE)
For 2017 Through 2020

IT Staffing Levels	2017	2018*	2019	2020
IT Officer	1	1	1	1
VCIO*			1	1
IT Manager	1	1	1	1
IT Consultant				1

*The VCIO was added to CNGHC's IT team on 03/31/2018, but these FTEs are reported as of January 1st of each year.
Source: Data Request EP-8

Due to CNGHC's smaller size, the company leverages part-time contractors to gain expertise without a full-time position. As such, the four FTEs in Exhibit IX-3, are comprised of two full-time CNG employees, a part-time virtual Chief Information Officer, and a team four of part-time consultants. Two of these people are full-time employees and five are full-time experts dedicating part-time hours to CNGHC and its subsidiaries. This group, less two of the consultant employees, meet weekly to discuss issues and planning, and to evaluate needs. Additionally, there is a weekly executive staff meeting, where the IT Officer discusses IT needs and projects with the rest of the companies' leadership.

CNGHC and its subsidiaries have reviewed their needs since the 2017 audit and have increased resources for IT and cybersecurity. This has vastly improved the companies' cybersecurity posture through engaging additional third-party expertise and regular review, analysis, and reporting.

<u>Follow-Up Recommendation</u> – None

Finding No. IX-6

Prior Situation – No risk analysis or vulnerability assessment had ever been performed at LGC or PCLP under CNGHC's ownership. Additionally, no penetration testing was performed on systems used by LGC or PCLP. CNGHC's IT staff were 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 before the end of fieldwork for the management audit.

Prior Recommendation– Engage a trusted outside agency or security specialist to conduct a vulnerability assessment and penetration test on PCLP and LGC facilities periodically.

Follow-Up Finding and Conclusion – **No penetration testing was conducted at the CNGHC companies.**

Current Review – Per 52 Pa. Code § 101.3(c), a jurisdictional utility shall maintain and implement an annual testing schedule of its physical security, cyber security, emergency response, and business continuity plans. There are different ways to test each plan both internally and externally. However, for physical and cyber security, both vulnerability assessments and penetration testing[12] are extremely helpful in understanding the strengths and weaknesses of a company's physical and cyber security posture. The auditors recommend testing occur annually with internal resources and every five years through a third-party, to maintain an awareness of security status and potential weaknesses and should encompass both vulnerability assessments and penetration tests.

As of November 30, 2020, no external vulnerability assessment had been performed of PCLP, LGC, CNG, or CNGHC (collectively referred to as companies). The companies reported that they were attempting to schedule one with DHS-CISA for the year but had not received a response. In the meantime, a contractor performed a risk analysis[13] on the company network in July 2020, but this work did not include a penetration test. Internal vulnerability assessments are conducted weekly through a review of the company's risk register, but this does not include physical or cyber penetration testing.

Although the companies' have improved their security posture through their vulnerability assessments, they have not obtained an independent penetration test. This omission introduces a gap in the companies' knowledge of their systems and security.

---

[12] A vulnerability assessment is an assessment of company systems and infrastructure to analyze for vulnerabilities, generally done with an insider's knowledge and access to the systems. A penetration test is an analysis of defenses generally conducted either by a third party, or by an insider pretending not to have normal access to systems or facilities, and attempting to break in, either virtually by cyber infiltration or attack, or physically, through clandestinely entering facilities to gain access to protected areas. Vulnerability assessments are useful to get a "bigger picture" look at the way a system or facility is designed related to security and vulnerabilities, while penetration testing is more useful for finding existing security vulnerabilities in specific systems or facilities.

[13] A Risk Analysis is a study to define possible risks to business continuity, whether they be security threats or vulnerability to specific infrastructure due to natural disaster, equipment breakdown, accident, etc.

<u>Follow-Up Recommendation</u> – Partner with a trusted third-party security specialist to perform physical and cyber penetration tests of PCLP and LGC's facilities and systems.

Finding No. IX-7

Prior Situation – LGC did not maintain fire extinguishers at certain gate stations and various locations lacked first aid kits. In addition, LGC had no safety data sheets (SDS) at any of its locations. CNG was utilizing an online SDS program, which LCG intended to adopt, but had not implemented as of July 2017.

Prior Recommendation – 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.

Follow-Up Finding and Conclusion – **Fire extinguishers and first aid kits were installed at gate stations and in company trucks, and the MSDS app was deployed at LGC; however, not all fire extinguishers were inspected appropriately.**

Current Review – 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.

CNGHC, CNG, and LGC use an SDS program, which makes SDS information available on employee phones and tablets. This software also keeps all SDS up to date. Meanwhile, PCLP uses physical SDS, and makes them available in appropriate locations such as the control center and near chemical storage. PCLP also has SDS available electronically; however, the app was not installed on field personnel's portable devices. The auditors found that the physical SDS were up to date.

In addition, first aid kits and fire extinguishers were found to be well stocked and fully charged at CNGHC, CNG, PCLP, and LGC locations. However, some fire extinguishers and first aid kits had not been inspected since 2018 at LGC, and not since February 2019 at PCLP. The contractor hired to conduct fire extinguisher inspections for PCLP abandoned the job in February 2019 with no explanation. LGC claimed it had recently resumed fire extinguisher inspections in March 2021, but the inspections were not recorded on the extinguishers. PCLP is planning on hiring a new contractor to perform fire extinguisher and first aid kit inspections but had not done so yet as of April 2021. 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."

The companies have provided adequate fire extinguishers, first aid equipment, and SDS information at all work locations, but has allowed inspection of fire extinguishers and first aid kits to lapse in some locations. Although the auditors confirmed that fire extinguisher levels and first aid kits were correct in all locations toured, the lack of monthly inspection could lead to equipment failures or inadequate emergency equipment in the future.

<u>Follow-Up Recommendation</u> – **Maintain current monthly inspection logs for all fire extinguishers and first aid kits.**

<u>Finding No. IX-8</u>

<u>Prior Situation</u> – Several minor vulnerabilities or deficiencies in physical security were noted during the auditors' inspections. Most deficiencies were due to facility age, oversight, weather, or general wear and tear. Many of these deficiencies could were addressed, had regular security inspections or reviews been conducted. Additional physical security measures were recommended by audit staff for consideration at facilities that contain systems, records, and IT infrastructure critical to the functioning of PCLP and LGC.

<u>Prior Recommendation</u> – Correct minor deficiencies in physical security at PCLP and LGC facilities, implement a system of security inspections at all facilities, and improve security measures.

<u>Follow-Up Finding and Conclusion</u> – **Many previously identified deficiencies were corrected; however, additional minor security and safety deficiencies were discovered during facility tours.**

<u>Current Review</u> – Minor physical security deficiencies were noted during inspection of PCLP, LGC, and CNG facilities. Most deficiencies were due to facility age, oversight, weather, or general wear and tear. Issues included fence issues such as barbed wire damage, or foliage overrunning fences, and unlocked IT equipment or IT storage facilities. These minor deficiencies in physical security could allow for points of entry through individual layers of security at several facilities. Holes in an individual layer of security can render that layer ineffective.

Physical security should be continuously addressed, and any deficiencies should be remedied in a timely manner. This should allow the company to maintain multiple, functional layers of security.

<u>Follow-Up Recommendation</u> – **Correct minor deficiencies in physical security and safety.**

Finding No. IX-9

Additional Finding and Conclusion – The process for developing the PSPs, ERPs, Emergency Action Plans (EAPs), and the BCPs is informal and lacks key steps and input.

Current Review – 52 PA § 101.3 requires each jurisdictional utility to establish written procedures to minimize the hazards resulting from an emergency. Among other requirements, the regulations require:

> *(a) A jurisdictional utility shall develop and maintain written physical and cyber security, emergency response and business continuity plans.*
>
> *(1) An emergency response plan must, at a minimum, include 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 preparedness support agencies and organizations…*
>
> *(b) A jurisdictional utility shall review and update these plans annually…*
>
> *(e) A plan shall define roles and responsibilities by individual or job function.*
>
> *(f) The responsible entity shall maintain a document defining the action plans and procedures described above.*

PCLP's PSP was last revised in September 2020. However, the company has not revised security site plans since February 16, 2012, under O&R. Although certain changes were made to site security, not all changes are reflected within the PSP. In addition, certain aspects of the PSP may be outdated or sub-optimal. For instance, the PSP directs that a disabled individual should not be evacuated except under the direction of authorized emergency personnel. Instead, the decision of shelter versus evacuation should be left to Floor Wardens based upon the conditions.

Meanwhile, the BCP features thorough planning and consideration of IT issues but lacks proper documentation of operational issues. In fact, there is little or no documentation for common operational issues such as natural disasters, loss of facilities, etc. The plan was created by the VP Gas Supply & Business Development; however, operations management has not provided their input as part of the planning process for responding to these types of operational conditions.

In addition, the BCP does not include return-to-operation goals, though the IT plan does have them. Consequently, although the company has IT-based return-to-operations goals in place, there are no established goals for return-to-operations addressing operational needs. The plan refers to an acceptable amount of time but does not further define this concept. Similarly, computer applications are listed by criticality/priority, but operational needs other than those which are computer-related are not listed. There are plans for dealing with loss of specific major pieces of infrastructure, but these plans are not documented within the BCP or other documents provided to the auditors. In addition, IT and cybersecurity risks were documented within the BCP, but operational risk assessments have only been performed informally and are not documented within the BCP.

Moreover, the overall BCP can be improved by adding vendors to the emergency contact information lists; defining requirements for operational emergency supplies (such as provisions for or plans to deal with employees working in shifts around the clock or working without electricity, running water, etc.); and adding plans for non-IT-related threats to business continuity (such as flooding, loss of gas supply, etc.)

The Gas Safety and Training Department is responsible for maintaining and revising LGC's ERP. The ERP is reviewed annually and distributed to the operations managers and the executive team, and filed with the New York State Public Service Commission, Safety Section if changes were made. LGC's ERP does not include notification for an outage as defined by 52 Pa Code § 67.1 (b):

> All electric, gas, water, steam and telephone utilities shall notify the Commission when 2,500 or 5.0%, whichever is less, of their total customers have an unscheduled service interruption in a single event for 6 or more projected consecutive hours.

In addition, the contact information for the PUC and local media is outdated in LGC's ERP. Furthermore, the communications plan does not provide guidance when information should be released and to which outlets. However, it does state that the company should communicate with customers, media, etc. through social media, website, traditional media (i.e., tv, radio, newspaper), etc. The communications plan should provide some guidance as to what types of scenarios warrant communications with the public via specific or all such channels.

Moreover, PCLP's ERP, like LGC's ERP, is focused on storm outages and not on other threats or types of emergencies. Although storm-caused outages are the most prevalent and other outages are similar in consequence and response requirements, other types of emergencies should be addressed in an ERP. In response, the VP of Gas Supply & Business Development is planning to develop Emergency Action Plans (EAPs) to supplement the ERP by addressing various other types of threats and emergencies, but these plans have not been completed as of April 2021. When the EAPs are completed, the General Manager of PCLP expects to review and revise them as needed.

It is best practice for utilities to follow a formalized, collaborative process for developing, reviewing, testing, revising, and training on emergency plans, with input from management of affected business units and responsibility assigned to management with the most relevant expertise. Without such a formalized, collaborative process, the VP of Gas Supply & Business Development has taken primary responsibility for most of the emergency planning, despite closer relevance to and more applicable expertise of Operations management for many of these plans. Given the changing threat landscape, changes in technology, and natural obsolescence over time, the PSP, BCP, and ERP at PCLP and LGC should be reviewed and updated as necessary. Changes to security and emergency preparedness measures should then be made in compliance with the newly updated plans.

<u>Follow-up Recommendation</u> – Formalize the process for developing, reviewing, testing, revising, and training on emergency and continuity plans. Assign primary responsibility for developing the ERP and EAPs to Operations, with support from IT/The Vice President of Gas Supply and Business Development. Primary responsibility for developing the BCP should be assigned to IT, with review and input from Operations.

Finding No. IX-10

Additional Finding and Conclusion – The PSP, ERP, and BCP are not sufficiently drilled or tested.

Current Review – According to 52 Pa Code § 101.3(c), a jurisdictional utility shall maintain and implement an annual testing schedule of these plans, referring to the PSP, ERP, BCP and CSP. As detailed in Finding No. IX-6, the companies have performed some testing of the CSP but have not conducted a penetration test. Similarly, no penetration test or physical vulnerability assessment was performed at the companies. However, CNGHC has participated in drills or exercises with federal, state, county, or local government emergency response managers in September 2019. As mentioned in Finding No. IX-6, the companies hope to partner with the Department of Homeland Security-CISA to conduct a vulnerability assessment, but CISA has not responded yet. Furthermore, no training was performed or offered on physical security, though an exercise is being planned and could qualify as a test of the PSP, if developed in such a manner.

Moreover, there is no specific schedule to test the ERP, but the plan is tested "as needed." Primarily, PCLP and the LGC utilize annual emergency management tabletop exercises as good opportunities to test their plans. These exercises are emergency response-based but are often not specific to gas or electric-related emergencies. The last tabletop attended was in the fall of 2019 due to the global COVID-19 pandemic.

As discussed in Finding No. IX-9, the BCP does not address specific operational emergencies. Therefore, no mock drills were conducted to test the Business Continuity Plan, though the companies have experienced several incidents that required the use of the BCP (i.e., COVID). Management has indicated that they are yet undecided on how they plan to test the BCP. The auditors suggest that the company must first document its planned response to operational conditions before a test could occur. In response, the companies indicate that they plan to develop EAPs (see Finding No. IX-9) that could address numerous deficiencies noted with the BCP and ERP. However, these EAPs will still need to be tested to be effective.

For the tests to be effective or when using actual emergencies to qualify as tests, the company needs to perform after action reviews (AARs). At PCLP, informal AAR discussions are used following an incident if it is deemed warranted, but these discussions are not documented. More specifically, no AAR has occurred since Super Storm Riley in March 2018. Meanwhile, LGC indicated that it has not had an emergency yet and therefore, no AAR was conducted. However, several large storms have activated certain pieces of the company's emergency response procedures. Although the impacts may have been minimal, the audit staff suggests that company performance during and immediately following a large storm is a perfect opportunity to test its emergency plans through an AAR. These types of tests can review performance based upon actual conditions and reveal opportunities for improvement in company performance and plans.

CNGHC, PCLP, and LGC have not prioritized testing of their emergency plans, in some cases because they have only recently been created. Without testing of emergency plans, opportunities for improvement might go unrecognized, potentially leading to injury or loss. Therefore, tests should occur annually of the CSP, ERP, BCP, and PSP.

Follow-up Recommendation – Develop a formal testing and drill program for the PSP, ERP, CSP, BCP, and the EAPs, utilizing a combination of drills, tabletop scenarios, and equipment testing as applicable.

Finding No. IX-11

Additional Finding and Conclusion – PCLP has the capability to automatically contact its customers directly during an emergency but has not fully implemented this feature.

Current Review – It is best practice to be able to communicate directly and clearly with customers during an emergency. In order to notify the public in the event of an emergency, PCLP's Customer Service Representatives provide emergency updates on the company website. Depending on the magnitude of the event, they will also use social media and local television and radio stations. Newspapers are also used. However, PCLP has access to software where customers can automatically be alerted to conditions via their cellphones. However, this was not implemented yet because of the cost and required customer permission. The auditors recognize the challenges with this type of communication method; however, the platform could offer numerous benefits to the company and customers. Clearly, this method of notification could be quick and ensure critical emergency or outage information reaches impacted customers (if they opt-in). In addition, there are numerous other customer service benefits to engaging the customer base, which is a valuable way to maintain the customer experience. For these reasons, the use of this software should be explored through a business case weighting the cost to implement with the potential benefits to customer service, emergency response, etc.

Follow-up Recommendation – Complete a business case for implementing the cell phone alert software to document the cost versus benefits.

<u>Finding No. IX-12</u>

<u>Additional Finding and Conclusion</u> – Storm kits required by the PCLP's Emergency Response Plan have not been assembled for immediate emergency use.

<u>Current Review</u> – According to PCLP's Emergency Response Plan, storm kits are to be prepared and available. Storm kits include tools and parts sufficient to outfit a work crew to respond to and repair storm damage. These kits are usually stocked so that outside work crews can be outfitted with the correct tools to work on the company's equipment in an emergency. PLCP plans to have these storm kits assembled on a pallet, with all the required tools and parts together in one place. The company has identified the materials for these kits, but has not put them together yet, as of April 2021.

<u>Follow-up Recommendation</u> – Assemble the storm kits required by the PCLP Emergency Response Plan.

Finding No. IX-13

Additional Finding and Conclusion – Physical security methods for facilities vary between Pike, Leatherstocking, and Corning.

Current Review – It is a best practice to standardize security systems and equipment where possible to allow for reduced maintenance costs and increased intra-company and cross-company security capabilities. Physical security features, such as camera presence and type, lock type, and alarm type and presence, differ between CNG, PCLP, and LGC. Because CNG, PCLP, and LGC have not standardized and centralized their security features and equipment, the companies cannot easily share security equipment parts and maintenance and cannot realize the benefits of centralized security features such as increased surveillance capabilities without increased manpower needs. Although standardizing security equipment across various utilities (i.e., CNG, LGC, and PCLP) may take some time, planning should begin now to ensure efficient and practical transitions.

Follow-up Recommendation – Build a business case to centralize uniform management of security with unified camera management, unified card reader systems, unified alarm systems, etc. between the companies.

Finding No. IX-14

Additional Finding and Conclusion – Trainings and certifications required for IT staff are not documented.

Current Review - Currently, only two employees within the companies have IT responsibilities, the VP Gas Supply & Business Development and the IT Manager. All other IT resources are outside contractors as discussed within the Background section. The VP Gas Supply & Business Development has created a list of role-specific competencies and qualities for the IT Manager, including job responsibilities and required skills. This list does not include required or optimal trainings or certifications, however.

The companies require all employees participate in certain trainings. For instance, the companies revamped their cybersecurity training program in March 2021, requiring a 45-minute annual training on cybersecurity. Similarly, certain certifications or proficiencies are needed to operate the companies' various IT resources. Although the companies outsource for some of this work, a key part of the companies' capabilities come from the IT Manager. The IT Manager can take whatever training courses are needed, but this is not managed or documented as part of a formal training program. Because of this, there is no record of what trainings are required to do the job and no program to define the training/certification needs of potential future hires/positions.

As a result, the companies lack formalized training programs for IT personnel and have no record of training and certification requirements to train replacements or new hires. Instead, the company should develop a training plan or list of requirements, certifications, and skills optimal candidates should have. This will help facilitate onboarding new employees when conditions arise or as part of a succession plan.

Follow-up Recommendation – Document required training, certifications, and skills for the IT Manager position for continuing education and to provide a foundational development plan for all future IT positions.

Finding No. IX-15

Additional Finding and Conclusion – The company lacks policies governing IT asset lifecycle management.

Current Review – CNGHC, CNG, LGC, and PCLP have no policies governing IT asset lifecycle management. Some lifecycle management practices are in place for certain equipment or systems, such as practices for asset retirement. For instance, there is a regular schedule to replace laptops, and proper disposal of hard drives, but these practices are not documented in a policy, however. Without an IT asset lifecycle policy, IT assets may not be repaired, retired, or replaced at optimal times, causing equipment to deviate from company norms, lead to outdated equipment, etc. Therefore, IT asset lifecycle management should be documented within a policy.

Follow-up Recommendation – **Establish and document a policy governing IT asset lifecycle management.**

X. CUSTOMER SERVICE

<u>Background</u> – Subsequent to the expiration of the Transition Service Agreement (TSA), PCLP customer service began handling its customer service functions internally in October 2017. These functions included call handling, billing, field services coordination and other services. PCLP employees also began performing meter reading, collections, shut-offs, and other field service activities.

Similarly, LGC's daily customer service functions were primarily handled by its internal staff. However, LGC's customer information management system (CIMS) and billing was supported by an affiliate, Mirabito Holding Incorporated (MHI).

In this chapter, three prior recommendations and prior situations are reviewed, and three follow-up findings and three recommendations are presented. The findings primarily relate to implementing meter reading efficiencies at LGC and developing customer service policies and procedures and reducing long term accounts receivable at PCLP.

<u>Finding No. X-1</u>

<u>Prior Situation</u> – LGC's meter reading process was initiated when route sheets were generated from the CIMS by MHI's Manager of Operations. The MHI Manager of Operations exported the route sheets from the CIMS to portable document files, which were sent via email to the LGC Office Manager. Route sheets were then printed out as hard copies and distributed to LGC's Gas Technicians who used the sheets to manually record meter readings, which were then faxed to MHI's Manager of Operations. The following business day, the MHI Manager of Operations manually entered the meter data from the route sheets into the CIMS. Despite the manual process, due to LGC's size, the meter reading and billing process was generally completed within two business days. Nonetheless, LGC's meter reading process required duplicative, manual work as the handwritten meter reads had to be reentered into LGC's billing system.

<u>Prior Recommendation</u> – Automate the LGC meter reading process to eliminate manual and redundant data entry tasks to improve efficiencies.

<u>Follow-up Finding and Conclusion</u> – LGC concluded that automation was unnecessary based on the number of customers it serves and made no changes to the meter reading process.

<u>Current Review</u> – LGC is a small regulated natural gas distribution utility with just over 400 residential customers and a dozen commercial customers as of December 31, 2020. This makes implementing AMI to its service territory cost prohibitive; however, by focusing exclusively on full automation, LGC is overlooking cost-effective alternatives that would increase efficiency and minimize interactions that introduce errors into the meter reading process.

Duplicative, manual processes are inefficient and increase the risk of data entry errors that lead to errors on customer accounts and bills. In LGC's case, relying on manual entries results in a duplicative process which increases LGC's risk of meter reading errors, thereby increasing the risk of billing errors. Solutions eliminating some or all manual and repetitive entries would allow employees to increase time spent on more value-added activities. There are potentially low-cost alternatives 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 handheld meter reading devices. These solutions would likely require a small capital cost to implement but elimination of the duplicative work would allow employees' time to be applied to more value-added activities.

<u>Follow-up Recommendation</u> – Implement improvements to the meter reading process that increase efficiency by eliminating duplicative and manual processes where feasible.

Finding No. X-2

Prior Situation – Many customer service functions were being 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 to assume the duties provided by O&R when the TSA expired. The CSRs and billing clerk were 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 had not documented its own policies and procedures, and relied upon its tariff for guidance when performing customer service-related duties.

Prior Recommendation – Document policies and procedures to govern customer service practices.

Follow-up Finding and Conclusion – PCLP developed high-level narratives for accounts receivable, revenues, and cash handling; however, customer service lacks policies and procedures detailing how duties and responsibilities are to be performed.

Current Review – In response to the management audit, PCLP indicated it would document customer service policies and procedures in a customer service handbook. It was originally targeted for completion in December of 2018 but was delayed into 2020 as a result of the COVID-19 pandemic. Due to the pandemic, the company focused on an immediate transition to telework for PCLP management and all PCLP customer service representatives (CSR).

However, the company has made some progress since the management audit. In September and October 2019, PCLP developed cycle narratives covering customer service functions[14] and the handling of funds (e.g., cash and cash equivalents). These high-level policy documents are the responsibility of PCLP's Chief Financial Officer (CFO) but do not detail everyday procedures for CSRs. Instead, the company continues to rely on customer service staff expertise to perform duties in compliance with PA PUC regulations.

Customer Service policies and procedures provide a basis for training new employees and ensure performance of customer service activities are consistent. PCLP customer service activities are affected by Pennsylvania regulations, policies and procedures developed with 52 Pa. Code Chapter 56 as guidance help ensures operations remain in compliance with all applicable regulations. In absence of documented policies and procedures, PCLP is relying heavily on the experience of its customer service staff and lacks safeguards against knowledge loss as result of employee departures.

Follow-up Recommendation – Complete and distribute PCLP's Customer Service Handbook.

[14] Accounting for new customers, meter reading, billing, cancel/re-bill or customer adjustments, collections, write-offs, reconciliations, and provision for uncollectible accounts

Finding No. X-3

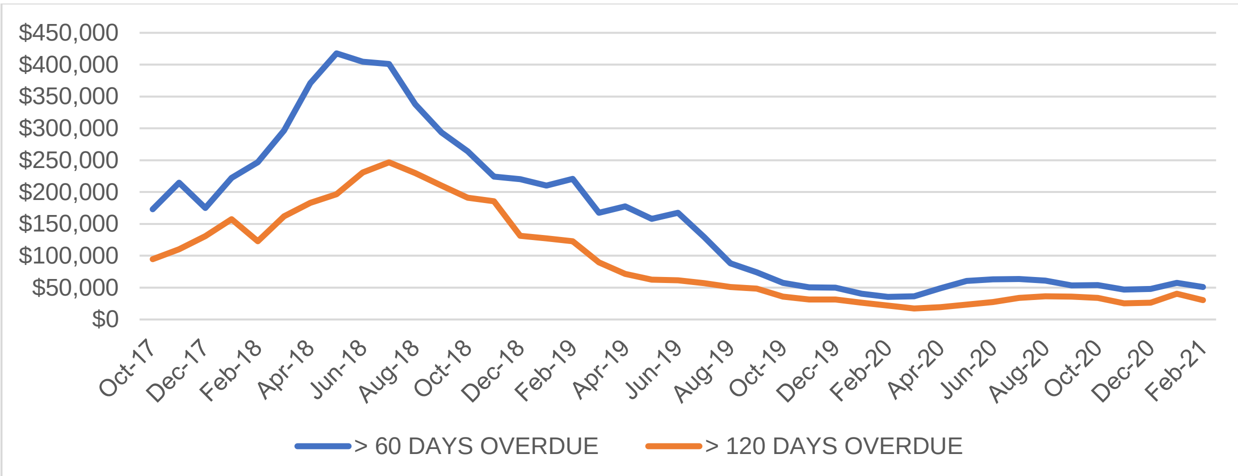
Prior Situation – Under the TSA, PCLP received services from O&R, including customer services and collections. PCLP's long-term customer accounts receivable aging category (180 days and over) had increased significantly since October 2016. In addition, PCLP's 2016 termination levels reflected significant decreases from the levels in prior years. 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 nonpayment allows for the continued accumulation of overdue balances and decreases the likelihood of repayment.

Prior Recommendation – Reduce long-term customer arrearages by implementing various collection methods including increased customer contact, review of customer repayment plans and terms, etc.

Follow-up Finding and Conclusion – PCLP reduced overdue customer account balances and bad debt levels.

Current Review – PCLP's General Manager (GM) indicated the newly formed customer service organization began performing duties in parallel with O&R for approximately two months in August and September 2017. PCLP customer service used those two months as a dry run before assuming customer service responsibilities from O&R in October 2017. In mid-2018, PCLP initiated efforts to collect on past due accounts and reduce customer accounts receivable arrearages. Accounts receivable aging data is shown in Exhibit X-1.

Exhibit X-1
Pike County Power and Light
Customer Accounts Receivable Aging (60 Days and 120 Days)
Monthly Balance from October 2017 – February 2021



Source: Data Requests CS-2 and CS-6

PCLP customer accounts receivable aging data shows PCLP customer service inherited elevated account balances that continued to decline through mid-2018. By mid-2019, the company successfully reduced arrearages to pre-2016 levels. PCLP's efforts consisted of targeting arrearages and ramping up collection activities, diligently following commission guidelines, and earmarking overdue accounts for future collection activity. In addition, PCLP leveraged several customer assistance programs used to aid residential customers struggling to pay utilities bills. In addition, the company wrote-off some bad debt expense, mainly in 2018 and first quarter 2019, but has averaged less than $13,000 per quarter since. Overdue receivables become more difficult to collect as they age, so it is important that utilities remain active and vigilant when contending with past due accounts. Ultimately, balances deemed uncollectible and written-off reduce company profits and ultimately increase consumer costs (i.e., rates).

<u>Follow-up Recommendation</u> – None

XI. SETTLEMENT AGREEMENT

Background – 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&R. The Joint Settlement Agreement at Docket No. A-2015-2517036 contained 16 stipulations the parties agreed upon to resolve competing positions between the parties. On August 31, 2016, CNGHC closed on the sale of PCLP.

In this chapter, one prior recommendation and prior situation is reviewed, and no follow-up findings and recommendations are presented.

Finding No. XI-1

Prior Situation – On August 31, 2016, CNGHC closed on the sale of PCLP. Concurrently, three transitional agreements went into effect between PCLP and O&R to facilitate a smooth transition and allow PCLP time to hire staff, acquire external resources, upgrade systems, transition key operating data, etc., as needed. During fieldwork of the 2017 Management Audit, the PUC auditors found that additional work was yet needed to complete several stipulations of the Settlement Agreements, as follows:

- Cast iron and bare steel (CIBS) study
- Implementation of a staffing plan to include approximately 12 full-time employees for PCLP
- Debt feasibility study to access the cost implications of an interest rate swap or fixed rate

Prior Recommendation – Continue efforts to ensure compliance with time-sensitive stipulations of the Settlement Agreement.

Follow-up Finding and Conclusion – PCLP has fulfilled the outstanding stipulations of its Settlement Agreements highlighted in the management audit.

Current Review – PCLP completed the remaining stipulations of the settlement agreement highlighted within the management audit. The company submitted the CIBS study to the Commission in February 2018 (see the Gas Operations chapter - Finding No. VIII-1). In addition, the staffing plan was submitted in April 2018 (see the Organizational Structure and Staffing chapter - Finding No. III-3). Lastly, PCLP studied the feasibility and cost and implication of an interest rate swap or similar switch to fixed rate debt and informed the Commission of the study’s status and results in the quarterly status reports filed with the Commission.

Follow-up Recommendation – None

XII. ACKNOWLEDGEMENTS

We wish to express our appreciation to the officers and staff of CNGHC, PCLP and LGC for their cooperation and assistance.

This audit was conducted by Jennie Banzhof, Barry Keener, and Michael Flynn of the Management Audit Division of the PUC Bureau of Audits.

Pennsylvania Public Utility Commission

www.puc.pa.gov

1-800-692-7380